DOCKETED	
Docket Number:	23-AFC-01
Project Title:	Morton Bay Geothermal Project (MBGP)
TN #:	249725
Document Title:	Morton Bay Geothermal Project AFC Volume 2 Appendix 5-2 Biological Resources
Description:	N/A
Filer:	Jerry Salamy
Organization:	Jacobs
Submitter Role:	Applicant Consultant
Submission Date:	4/18/2023 10:56:22 AM
Docketed Date:	4/18/2023

Appendix 5.2A Potential for Occurrence and Observed Species

				Blooming		
Scientific Name	Common Name	Family	ESA/CESA/CNPS ^a	Period	Habitat Requirements	Occurrence Potential ^b
Astragalus crotalariae	Salton milk-vetch	Fabaceae	None/None/CRPR 4.3	Jan-Apr	saline soils. Known from clay flats, alkali sinks, mud flats, and roadsides.	Low Potential. Suitable saline and alkaline habitat is present in BSA. Historical records of this speicies from 1985 are located within approximately 1 mile of the BSA. This species was not observed during protocol-level botanical surveys.
Astragalus insularis var. harwoodii	Harwood's milk-vetch	Fabaceae	None/None/CRPR 2B.2	Jan-May	Annual found in desert dunes, Mojave desert scrub, in gravel and sandy conditions. Commonly occurs on desert pavement. This species is not tolerant of saline conditions.	Not Expected. No suitable habitat in the BSA.
Astragalus sabulonum	Gravel milk-vetch	Fabaceae	None/None/CRPR 2B.2	Feb-Jun	Annual/Perennial found in desert dunes, Mojave and Sonoran desert scrub in flats, gravelly, sandy, wash conditions. Sometimes roadsides. This species is not known to occur in saline conditions.	Not Expected. No suitable habitat in the BSA.
Calliandra eriophylla	Desert fairy duster	Fabaceae	None/None/CRPR 2B.3	Feb-Mar	Perrenial found in Mojave desert scrub in sandy washes, slopes, and mesas.	Not Expected. No suitable habitat in the BSA.
Cylindropuntia munzii	Munz's cholla	Cactaceae	None/None/CRPR 1B.3	May	Perennial found in Sonoran desert scrub. This species is not tolerant of saline conditions.	Not Expected. No suitable habitat in the BSA.
Ditaxis claryana	Glandular ditaxis	Euphorbiaceae	None/None/CRPR 2B.2	Oct-Mar	Perennial found in Mojave and Sonoran desert scrub on limestone or carbonate substrait.	Not Expected. No suitable habitat in the BSA.
Euphorbia abramsiana	Abrams' spurge	Euphorbiaceae	None/None/CRPR 2B.2	(Aug) Sep- Nov	Annual found in Mojave and Sonoran desert scrub. Known to occur in sandy depressions after summer rainfall. May not tolerate saline soils.	Not Expected. No suitable habitat in the BSA.
Euphorbia arizonica	Arizona spurge	Euphorbiaceae	None/None/CRPR 2B.3	Mar-Apr	Perennial found in sandy Sonoran desert scrub. Known to occur in sandy depressions after summer rainfall. May not tolerate saline soils.	Not Expected. No suitable habitat in the BSA.
Euphorbia platysperma	Flat-seeded spurge	Euphorbiaceae	None/None/CRPR 1B.2	Feb-Sep	Annual found in desert dunes and Sonoran desert scrub. Known to occur in sandy depressions after summer rainfall. May not tolerate saline soils.	Not Expected. No suitable habitat in the BSA.
Herissantia crispa	Curly herissantia	Malvaceae	None/None/CRPR 2B.3	(Apr) Aug- Sep	Annual/perrenial found in Sonoran desert scrub. May occur in disturbed locations such as roadsides.	Not Expected. No suitable habitat in the BSA.
Hymenoxys odorata	Bitter hymenoxys	Asteraceae	None/None/CRPR 2B.1	Feb-Nov	Annual found in riparian scrub and Sonoroan desert scrub.	Not Expected. Riparian habitat in the BSA was along drains and canals and is not suitable habitat for this species. No known records in vicinity. This species was not observed during protocol-level botanical surveys.
Johnstonella costata	Ribbed cryptantha	Boraginaceae	None/None/CRPR 4.3	Feb-May	Annual found in desert dunes, and sandy Mojave and Sonoran desert scrub.	Not Expected. No suitable habitat in the BSA.
Juncus acutus ssp. leopoldii	Southwestern spiny rush	Juncaceae	None/None/CRPR 4.2	(Mar) May- Jun	Perennial found in alkaline seeps and meadows, coastal marshes and swamps, and coastal dunes.	Low Potential. Suitable riparian habitat is present in BSA. No records of this species in the BSA. This species was not observed during protocol-level botanical surveys.

Appendix 5.2A, Table A-1

Special-Status Plants with the Potential for Occurrence

Morton Bay Geothermal Project

				Blooming		
Scientific Name	Common Name	Family	ESA/CESA/CNPS ^a	Period	Habitat Requirements	Occurrence Potential ^b
Juncus cooperi	Cooper's rush	Juncaceae	None/None/CRPR 4.3	Apr-May (Aug)	Perennial found in saline meadows and seeps.	Low Potential. Suitable saline meadow habitat present in BSA. No records of this species in the BSA. This species was not observed during protocol-level botanical surveys.
Lycium torreyi	Torrey's box-thorn	Solanaceae	None/None/CRPR 4.2	(Jan-Feb) Mar-Jun (Sep-Nov)	Perennial shrub found in Mojave and Sonoran desert scrub.	Not Expected. No suitable habitat in the BSA.
Mirabilis tenuiloba	Slender-lobed four o'clock	Nyctaginaceae	None/None/CRPR 4.3	(Feb) Mar- May	Perennial found in Sonoran desert scrub.	Not Expected. No suitable habitat in the BSA.
Panicum hirticaule ssp. hirticaule	Roughstalk witch grass	Poaceae	None/None/CRPR 2B.1	Aug-Dec	Annual found in sandy, silty depressions in desert dunes, Mojave and Sonoran desert scrub, and Joshua tree woodlands.	Not Expected. No suitable habitat in the BSA.
Pilostyles thurberi	Thurber's pilostyles	Apodanthaceae	None/None/CRPR 4.3	Dec-Apr	Parasitic perennial found most commonly on host plant Emory's indigo bush (<i>Psorothamnus emoryi</i>). Emory's indigo bush may occur on sandy beaches, but this species is not tolerant of saline soils.	Not Expected. No suitable habitat in the BSA.
Salvia greatae	Orocopia sage	Lamiaceae	None/None/CRPR 1B.3	Mar-Apr	Perennial shrub found in Mojave and Sonoran desert scrub. Not known to occur in saline habitats.	Not Expected. No suitable habitat in the BSA.
Teucrium cubense ssp. depressum	Dwarf germander	Lamiaceae	None/None/CRPR 2B.2	Mar-May (Sep-Nov)	Annual found in desert dunes, playa margins, and Sonoran desert scrub.	Not Expected. No suitable habitat in the BSA.

Notes:

CESA = California Endangered Species Act

ESA = Federal Endangered Species Act

CNPS = California Native Plant Act

CRPR = California Rare Plant Rank

1A = Presumed extinct from California

1B = Rare, threatened, or endangered in California and elsewhere

2A = Extirpated in California, common elsewhere

2B = Rare, threatened, or endangered in California, but more common elsewhere

4 = Plants of Limited Distribution – A Watch List

Threat ranks:

0.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

0.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

0.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

b Potential for Occurrence definitions are provided in the body text (Section 5.2.1.5.1)

^a Status Definitions:

Common Name	Scientific Name	CESA/ESA	CDFW Status ^a	Other Status ^b	Habitat Requirements	Potential for Occurrence ^c
Invertebrates						
Monarch butterfly	Danaus plexippus plexippus	None/FC	None	None	Migratory invertebrate. Monarchs in the southwest live in canyons or riparian areas. They lay their eggs on milkweed (Asclepias spp.), which caterpillars feed exclusively on. The adults will nectar on many other species besides milkweed.	Not Expected. No milkweed observed during botanical surveys of the BSA.
Fish			!			
Desert pupfish	Cyprinodon macularius	SE/FE	None	None	Desert ponds, springs, marshes and streams in Southern California.	Not Expected. No suitable habitat for this species in the BSA. This species is known to occur in the vicintiy, but the project will not impact any water ways.
Razorback sucker	Xyrauchen texanus	SE/FE	FP	None	Found in the Colorado river bordering California.	Not Expected. No suitable habitat for this species in the BSA.
Amphibians and Reptiles		•	•	•		
Couch's spadefoot	Scaphiopus couchii	None	SSC	None	Temporary desert rain pools that last at least 7 days, within water temps > 15C, and subterranean refuge sites close by.	Not Expected. No suitable habitat for this species in the BSA.
Flat-tailed horned lizard	Phrynosoma mcallii	None	SSC	None	Restricted to desert washes and desert flats in central riverside, eastern San Diego, and Imperial counties.	Not Expected. No suitable habitat for this species in the BSA.
Lowland leopard frog	Lithobates yavapaiensis	None	SSC	None	Were found along the Colorado river and in streams near the Salton sea.	Not Expected. No suitable habitat for this species in the BSA.
Mojave Desert tortoise	Gopherus agassizii	ST ^d /FT	None	None	Most commonly inhabits desert scrub, desert wash and Joshua tree habitats. The desert tortoise requires friable soil for burrow and nest construction and prefers creosote bush habitat and areas with wildflower blooms.	
Sonoran Desert toad	Incilius alvarius	None	SSC	None	Breeds in temporary pools and irrigation ditches along the Colorado River and Southern Imperial Valley.	Not Expected. One historical CNDDB occurrence from 1916, possibly extripated. The project will not impact any water ways.
Birds			1			
Black skimmer	Rynchops niger	None	SSC	USFWS - BCC	Nest on gravel, bars, low islets, and sandy beaches. CDFW SSC status for nesting only.	Not Expected. No suitable nesting habitat in BSA. This species is known from Refuge and historical CNDDB occurrence from 1998.
Black-tailed gnatcatcher	Polioptila melanura	None	WL	None	Primarily inhabits wooded desert wash habitats; also occurs in desert scrub habitat, especially in winter.	Not Expected. No suitable habitat in the BSA. Historical CNDDB occurrences from 1968 and before. This species is uncommon to fairl common in the Refuge.
Burrowing owl	Athene cunicularia	None	SSC	USFWS - BCC	Inhabits open, dry annual or perennial grasslands, desert and scrublands characterized by low growing vegetation.	Present: Suitable habitat, sign, and live owls were obserevd within the BSA during the March 2022 surveys. CNDDB occurrences of this species in the BSA.
California black rail	Laterallus jamaicensis coturniculus	ST/None	FP	USFWS - BCC	Inhabits freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays.	Not Expected. Protocol-level rail surveys conducted in 2022 in BSA did not detect any California black rail.
California brown pelican	Pelecanus occidentalis californicus	Delisted/Delist ed	FP	None	Colonial nester on coastal islands just outside the surf line. Known to nest on Obsidian Butte and at mouth of Alamo River.	High potential: The BSA has no potential nesting or foraging for this species, but because of proximity to a known nesting colony on Obsidian Butte and Alamo River delta, this species would be expected to fly over the BSA. Forages on open water of Salton Sea. CNDDB records of this species in BSA vicinity. This species was not observed during biological surveys of the BSA.

Common Name	Scientific Name	CESA/ESA	CDFW Status ^a	Other Status ^b	Habitat Requirements	Potential for Occurrence ^c
California gull	Larus californicus	None	WL	USFWS - BCC	Littoral waters, sandy beaches, waters and shorelines of bays, tidal mudflats, marshes, and lakes. CDFW WL status only for nesting.	Present. Species was incidentally observed during surveys within the BSA. Moderately suitable nesting habitat and foraging habitat within the BSA. Historical CNDDB occurrence from 1999 and before. This species is common to abundant in the Refuge year-round.
Cooper's hawk	Accipiter cooperii	None	WL	None	Nest sites mainly in woodland, riparian growths of deciduous trees. CDFW WL for nesting only.	Present. Species was incidentally observed during surveys within the BSA. Moderately suitable nesting habitat and foraging habitat within the BSA. No documented occurrences in CNDDB. This species is reported as uncommon in the Refuge.
Crissal thrasher	Toxostoma crissale	None	SSC	None	Resident of southeastern deserts in desert riparian and desert wash habitats	Not Expected. Historical CNDDB records from 1940-1960s of this species in BSA vicinity. This species is rare to very uncommon in the Refuge. No suitable riparian habitat in the BSA.
Gila woodpecker	Melanerpes uropygialis	SE/None	None	USFWS - BCC	In California, inhabits cottonwoods and other desert riparian trees, shade trees and date palms.	Not Expected. Historical CNDDB occurrences of this species from 1940-1950's. This species uncommon to fairly common in the Refuge. No suitable riparian habitat in the BSA.
Gray-headed junco	Junco hyemalis caniceps	None	WL	None	Summer resident of Clark Mountain (Eastern San Bernardino county) and Grapevine mountains (Inyo county). Nesting only.	Not Expected. Historical CNDDB occurrence from 1957. This species is rare to very uncommon in the Refuge.
Gull-billed tern	Gelochelidon nilotica	None	SSC	USFWS - BCC	Only known breeding colonies at San Diego bay and the Salton Sea. CDFW SSC status is for nesting only.	Not Expected. No suitable nesting habitat in the BSA. This species is known from the Refuge but only historical CNDDB occurrences from 1998 are present in BSA vicinity.
Le Conte's thrasher	Toxostoma lecontei	None	SSC	USFWS - BCC	Inhabits open desert wash, desert scrub, alkali desert scrub and desert succulent scrub habitat. This species commonly nests in dense, spiny shrub or densely branched cactus in desert wash habitat.	Not Expected. No suitable nesting habitat in BSA. CNDDB occurrence from 2009 in Refuge, but Refuge lists this species as extripated breeding habitat.
Least bittern	lxobrychus exilis	None	SSC	None	This secretive species breeds in marshes, including at the Salton Sink. Least bitterns build nests on platforms of emergent vegetation above water on cattails and bulrush species.	Present. Species was incidentally observed during rail surveys. Moderately suitable nesting habitat and foraging habitat within the BSA. No documented occurrences in CNDDB. This species is uncommon in the Refuge.
Loggerhead shrike	Lanius ludovicianus	None	SSC	None	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub, and washes.	Low Potential. No suitable nesting habitat in BSA. CNDDB occurrence from 2007. The Refuge lists this species as occasional.
Long-billed Curlew	Numenius americanus	None	WL	None	Inhibits Great Basin grassland, meadow and seeps. Favors gravelly soils and gently rolling terrain, and agriculture. Breeds in upland shortgrass prairies and wet meadows. Winters in Imperial County. CDFW WL for nesting only.	Present. Species was incidentally observed during surveys; however, no suitable nesting habitat is present within the BSA. This species has potential to forage in the BSA. No documented occurrences in CNDDB. Excluding the summer, common to abundant at the Refuge.
Merlin	Falco columbarius	None	WL	None	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, farms, and ranches. Clumps of trees or windbreaks are required for roosting in open country.	Not Expected. No potentially suitable nesting habitat in BSA. CNDDB occurrences in desert scrub east of the BSA. Rare to very uncommonly present in Refuge.
Mountain plover	Charadrius montanus	None	SSC	USFWS - BCC	Inhabits Great Basin grassland and scrub, Mojavean desert scrub, and Sonoran desert scrub. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores. This species is known to overwinter and forage in agricultural lands in Imperial Valley.	Low Potential. No suitable breeding habitat in the BSA, but this species is known to forage and overwinter in agricultural lands. Numerous CNDDB occurrences in BSA vicinity. This species is uncommon to farily common in the Refuge. This species was not observed during biological surveys of the BSA.

Common Name	Scientific Name	CESA/ESA	CDFW Status ^a	Other Status ^b	Habitat Requirements	Potential for Occurrence ^c
Short-eared owl	Asio flammeus	None	SSC	USFWS - BCC	Found in swamp lands, both fresh and salt lowland meadows, irrigated alfalfa fields. CDFW SSC status for nesting only.	Low Potential. No suitable nesting habitat in the BSA. Historical CNDDB occurrence of this species from 1956. This species is rare to occassionally observed in the Refuge.
Southwestern willow flycatcher	Empidonax traillii extimus	SE/FE	None	None	Inhabits riparian woodlands in southern California.	Not Expected. No suitable habitat in BSA. One CNDDB occurrence in vicinity from 2007, and not reported from occurring in the Refuge.
Western Snowy Plover	Charadrius alexandrinus nivosus	None/FT	SSC	None	Inhabits Great Basin standing waters, sandy shore, and wetland habitats. Needs sandy, gravelly, or friable soils for nesting.	Not Expected. No suitable nesting habitat in BSA. One historical CNDDB occurrence of this species from 1999. This species is uncommon to fairly common in the Refuge.
White-faced Ibis	Plegadis chihi	None	WL	None	Forages in fresh emergent wetland, wet meadows, and flooded/irrigated pastures and croplands. Nests in dense fresh emergent wetland. CDFW WL for nesting only.	Present. Species was incidentally observed during surveys. Moderately suitable nesting habitat and foraging habitat within the BSA. Historical CNDDB occurrence from 1980. This species is common to abundant in the Refuge.
Yellow warbler	Setophaga petechia	None	SSC	USFWS - BCC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in cascades and Sierra Nevada. CDFW SSC status for nesting only.	Moderate Potential. Suitable riparian nesting habitat in the BSA. Historical CNDDB occurrences of this species from the 1952. This species is common to occassionally known in the Refuge. This species was not observed during biological surveys of the BSA.
Yellow-breasted chat	lcteria virens	None	SSC	None	Summer resident inhabits riparian thickets of willow and salt cedar near watercourses. CDFW SSC status for nesting only.	Not Expected. No suitable riparian habitat in the BSA. Historical CNDDB occurrences of this species from the 1960s. This species is rare to very uncommon in the Refuge.
Yuma Ridgway's rail	Rallus obsoletus yumanensis	ST/FE	FP	None	Nests in freshwater marshes along the Colorado river and along the south and east ends of the Salton sea.	Present. Protocol-level surveys confirmed presence of this species within the BSA.

Common Name	Scientific Name	CESA/ESA	CDFW Status ^a	Other Status ^b	Habitat Requirements	Potential for Occurrence ^c
Mammals						
American badger	Taxidea taxus	None	SSC	Fur bearing mammal	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils in uncultivated land.	Low Potential. Historical CNDDB occurrences of this species from 1937. This species is known to occur on the Refuge. The BSA provides low quality suitable habitat. This species was not observed during biological surveys of the BSA.
Big free-tailed bat	Nyctinomops macrotis	None	SSC	None	Roosts in cliffs, rock crevices and some documentation of in buildings, caves, and tree cavities. This species prefers rocky and arid habitats including desert shrub, woodlands, evergreen forests, and riparian.	Low Potential. No CNDDB records of this species in vicinity, but this species is known to occur on the Refuge. No suitable roosting habitat other than low quality buildings. This species may forage on agricultural lands in BSA and vicinity. This species was not observed during biological surveys of the BSA.
Desert bighorn sheep	Ovis canadensis nelsoni	None	FP	None	Widely distributed from the White Mountains in Mono County to the Chocolate Mountains in Imperial County.	Not Expected. Historical CNDDB occurrence from 1986 near Chocolate Mountains. No suitable habitat in the BSA.
Desert kit fox	Vulpes macrotis arsipus	None	None	Fur bearing mammal	Inhabits open desert, shrubby, or shrub-grass habitat. This nocturnal species forages at night and typically resides in a den or burrow during the day.	Low Potential. No CNDDB records of this species in vicinity, but this species is known to occur on the Refuge. This species was not observed during biological surveys of the BSA.
California leaf-nosed bat	Macrotis californicus	None	SSC	None	Roost in caves, mines and buildings. Utilizes desert riparian habitat.	Low Potential. No CNDDB records of this species in vicinity, but this species is known to occur on the Refuge. No suitable roosting habitat other than low quality buildings. This species may forage on agricultural lands in BSA and vicinity. This species was not observed during biological surveys of the BSA.
Mexican long-tongued bat	Choeronycteris maxicana	None	SSC	None	Roosts in caves, mines, rock crevices, and abandoned buildings. Known to use thorn scrub, Palo Verde-saguaro desert, semi-desert grassland, oak woodland, tropical deciduous forests, and riparian vegetation.	Low Potential. No CNDDB records of this species in vicinity, but this species is known to occur on the Refuge. No suitable roosting habitat other than low quality buildings. This species may forage on agricultural lands in BSA and vicinity. This species was not observed during biological surveys of the BSA.
Pallid bat	Antrozous pallidus	None	SSC	None	Inhabits rocky canyons, open farmland, scattered desert scrub, grassland, shrubland, woodland, and mixed conifer forest.	Low Potential. Historical CNDDB occurrences of this species from 1994. This species is known to occur on the Refuge. No suitable roosting habitat. This species may forage on agricultural lands in BSA and vicinity. This species was not observed during biological surveys of the BSA.
Pocketed free-tailed bat	Nyctinomops femorosaccus	None	SSC	None	Variety of arid areas in southern California; pine juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc.	Low Potential. Historical CNDDB occurrences of this species from 1994. This species is known to occur on the Refuge. No suitable roosting habitat. This species may forage on agricultural lands in BSA and vicinity. This species was not observed during biological surveys of the BSA.
Spotted bat	Euderma maculatum	None	SSC	None	Roosts in prominent rock features. Desert desert-scrub, pinyon-juniper woodland, ponderosa pine, mixed conifer forest, canyon bottoms, rims of cliffs, riparian areas, fields, and open pasture.	Low Potential. No CNDDB records of this species in vicinity, but this species is known to occur on the Refuge. No suitable roosting habitat other than low quality buildings. This species may forage on agricultural lands in BSA and vicinity. This species was not observed during biological surveys of the BSA.
Western mastiff bat	Eumops perotis californicus	None	SSC	None	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Low Potential. Historical CNDDB occurrences of this species from 1994. No suitable roosting habitat. This species may forage on agricultural lands in BSA and vicinity. This species was not observed during biological surveys of the BSA.

Appendix 5.2A, Table A-2

Special-Status Wildlife with the Potential for Occurrence

Morton Bay Geothermal Project

Common Name	Scientific Name	CESA/ESA	CDFW Status ^a	Other Status ^b	Habitat Requirements	Potential for Occurrence ^c
Western yellow bat	Lasiurus xanthinus	None	SSC			Low Potential. Historical CNDDB occurrences of this species from 1994. This species is known to occur on the Refuge. No suitable roosting habitat. This species may forage on agricultural lands in BSA and vicinity. This species was not observed during biological surveys of the BSA.
Yuma hispid cotton rat	Sigmodon hispidus eremicus	None	SSC		Along the Colorado river and in grass and agricultural areas near irrigation waters. Refuge literature indicates this species is relatively common in agricultural fields and moist habitats.	Moderate Potential. Moderate quality suitable habitat is present in the marsh, riparian, and agricultural lands in BSA. CNDDB occurrence of this species from 2008 in 1 mile buffer. This species is common in the Refuge. This species was not observed during biological surveys of the BSA.

Notac

Caspian tern were included in CNDDB query but were not included in this analysis because their only special-status listing is International Union for Conservation of Nature least concern.

^a CDFW Status

^b Other Status

CESA = California Endangered Species Act

CDFW = California Department of Fish and Wildlife

ESA = Federal Endangered Species Act

FC = Federal Candidate for listing

FE = Federally Endangered

FT = Federally Threatened

FP = Fully Protected

SE = State Endangered ST = State Threatened

SSC = Species of Special Concern

USFWS BCC = United State Fish and Wildlife Service Bird of Conservation Concern

c Potential for Occurrence definitions are provided in the body text (Section 5.2.1.5)

d Desert tortoise are listed as CESA threatened. As of October 19, 2020, California Fish and Game Commission listed this species as candidate species for consideration as CESA endangered (2020).

Appendix 5.2A, Table A-3 Observed Plant Species Morton Bay Geothermal Project

	ermal Project	Common Name	Cal-IPC/CDFA/CCR 4500
Family	Species Name		Noxious Weed
Aizoaceae	Sesuvium verrucosum	Western sea-purslane	
Amaranthaceae	Allenrolfea occidentalis	lodine bush	
Amaranthaceae	Atriplex lentiformis	Big saltbush	
Amaranthaceae	Atriplex lindleyi	Lindley's saltbush	
Amaranthaceae	Chenopodium murale	Nettle lead goosefoot	
Amaranthaceae	Salsola tragus	Russian thistle	Cal-IPC Limited/CDFA C/Yes
Amaranthaceae	Suaeda nigra	Bush seepweed	
Asteraceae	Chloracantha spinosa	Spiny Chloracantha	
Asteraceae	Helianthus annuus	Common sunflower	
Asteraceae	Lactuca serriola	Prickly lettuce	
Asteraceae	Pluchea sericea	Arrow-weed	
Asteraceae	Senecio vulgaris	Common groundsel	
Asteraceae	Sonchus oleraceus	Common sow thistle	
Asteraceae	Xanthium strumarium	Cocklebur	
	Heliotropium curassavicum	Seaside heliotrope, Alkali	
Boraginaceae		heliotrope	
Brassicaceae	Sisymbrium irio	London rocket	Cal-IPC Limited/None/None
Caryophyllaceae	Spergularia marina	Saltmarsh sand-spurrey	
Convolvulaceae	Cressa truxillensis	Alkali weed	
Cyperaceae	Scirpus sp.	Sedge species	
Cyperaceae	Bolboschoenus maritimus ssp. Paludosus	Alkali bulrush	
Fabaceae	Medicago sativa	Alfalfa (cultivated)	
Fabaceae	Melilotus albus	White sweetclover	
Malvaceae	Malva parviflora	Cheeseweed, little mallow	
Malvaceae	Malvella leprosa	Alkali-mallow	
Poaceae	Arundo donax	Giant reed	Cal-IPC High/None/Yes
Poaceae	Cynodon dactylon	Bermuda grass	Cal-IPC Moderate/None/None
Poaceae	Distichlis spicata	Salt grass	
Poaceae	Leptochloa fusca	Sprangletop	
Poaceae	Phalaris minor	Little-seeded canary grass	
Poaceae	Polypogon monspeliensis	Rabbitfoot grass	Cal-IPC Limited/None/None
Poaceae	Triticum aestivum	Wheat (cultivated)	
Polygonaceae	Persicaria hydropiperoides	False waterpepper	
Polygonaceae	Rumex fueginus	Golden dock	
Polygonaceae	Rumex obtusifolius	Bitter dock	
Tamaricaceae	Tamarix sp.	Salt cedar	Cal-IPC High/None/Yes
Typhaceae	Typha domingensis	Southern cattail	

Appendix 5.2A, Table A-4 Observed Wildlife Species

Morton Bay Geothermal Project

Species Category	Common Name	Species Name		
leptiles	Marcy's checkered garter snake	Thamnophis marcianus marcianus		
	Side-blotched lizard	Uta stansburiana		
Birds	American avocet	Recurvirostra americana		
	American coot	Fulica americana		
	American kestrel	Falco sparverius		
	Barn swallow	Hirundo rustica		
	Black-crowned night heron	Nycticorax nycticorac		
	Black phoebe	Sayornis nigricans		
	Black-necked stilt	Himantopus mexicanus		
	Black-throated sparrow	Amphispiza bilineata		
	Burrowing owl *	Athene cunicularia		
	California gull *	Larus californicus		
	California quail	Callipepla californica		
	Cattle egret	Bubulcus ibis		
	Common gallinule	Gallinula galeata		
	Common raven	Corvus corax		
	Cooper's hawk *	Accipiter cooperi		
	Costa's hummingbird	Calypte costae		
	Double-crested cormorant	Phalacrocorax auratus		
	European starling	Sturnus vulgaris		
	Great blue heron	Ardea herodias		
	Great egret	Casmerodius albus		
	Greater roadrunner	Geococcyx californianus		
	Great-tailed grackle	Quiscalus mexicanus		
	Ground dove	Columbina passerine		
	Inca dove	Columbina inca		
	Killdeer	Charadrius vociferus		
	Least bittern *	Ixobychus exilis		
	Long-billed curlew *	Numenius americanus		
	Mallard	Anas platyrhynochos		
	Marsh wren	Cistothorus palustris		
	Mourning dove	Zenaida macroura		
	Northern harrier	Circus cyaneus		
	Northern shoveler	Spatula clypeata		
	Pied-billed grebe	Podilymbus podiceps		
	Red-tailed hawk	Buteo jamaicensis		
	Red-winged blackbird	Agelaius phoeniceus		
	Ring-billed gull	Larus delawarensis		
	Rock pigeon	Columba livia		
	Rough-winged swallow	Stelgidopteryx serripennis		
	Ruddy duck	Oxyura jamaicensis		
	Sandhill crane	Grus canadensis		
	Snowy egret	Egretta thula		
	Snowy egret Snowy plover	Charadrius nivosus		
	Turkey vulture	Cathartes aura		
	,	Rallus limicola		
	Virginia rail Western meadowlark	Sturnella neglecta		
	White pelican	Pelecanus erythrorhynchos		
	White-faced ibis *	Pelecanus erythrornynchos Plegadis chihi		
A = =	Yellow-rumped warbler	Setophaga coronata		
Mammals	Bobcat	Lynx rufus		
	Botta's pocket gopher	Thomomys bottae		
	Coyote	Canis latrans		
	Racoon	Procyon lotor		
	Desert Cottontail	Sylvilagus audubonii		

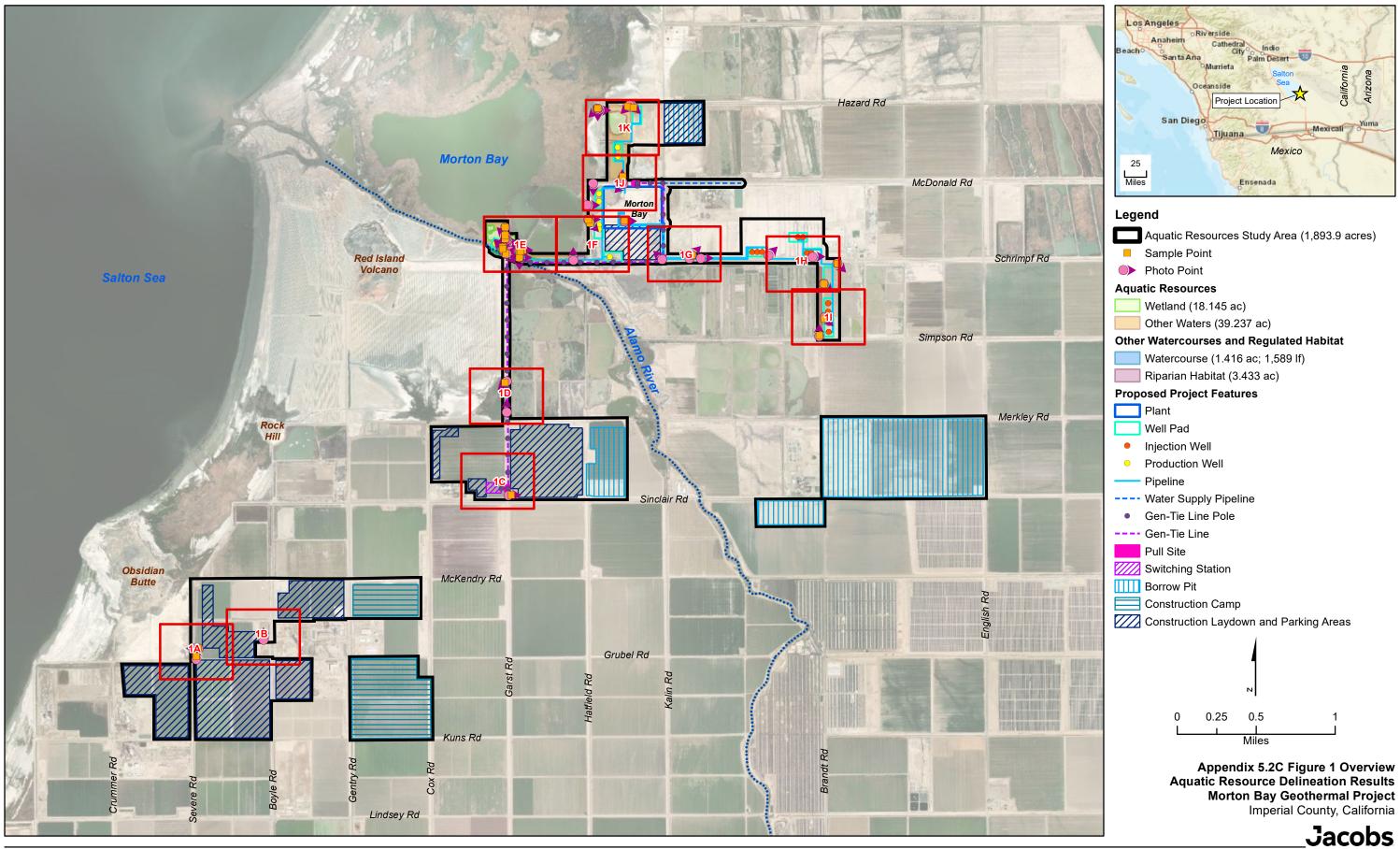
* This is a special-status wildlife species with more information provided in Appendix 5.2A.

Appendix 5.2B CNDDB Figures - Confidential

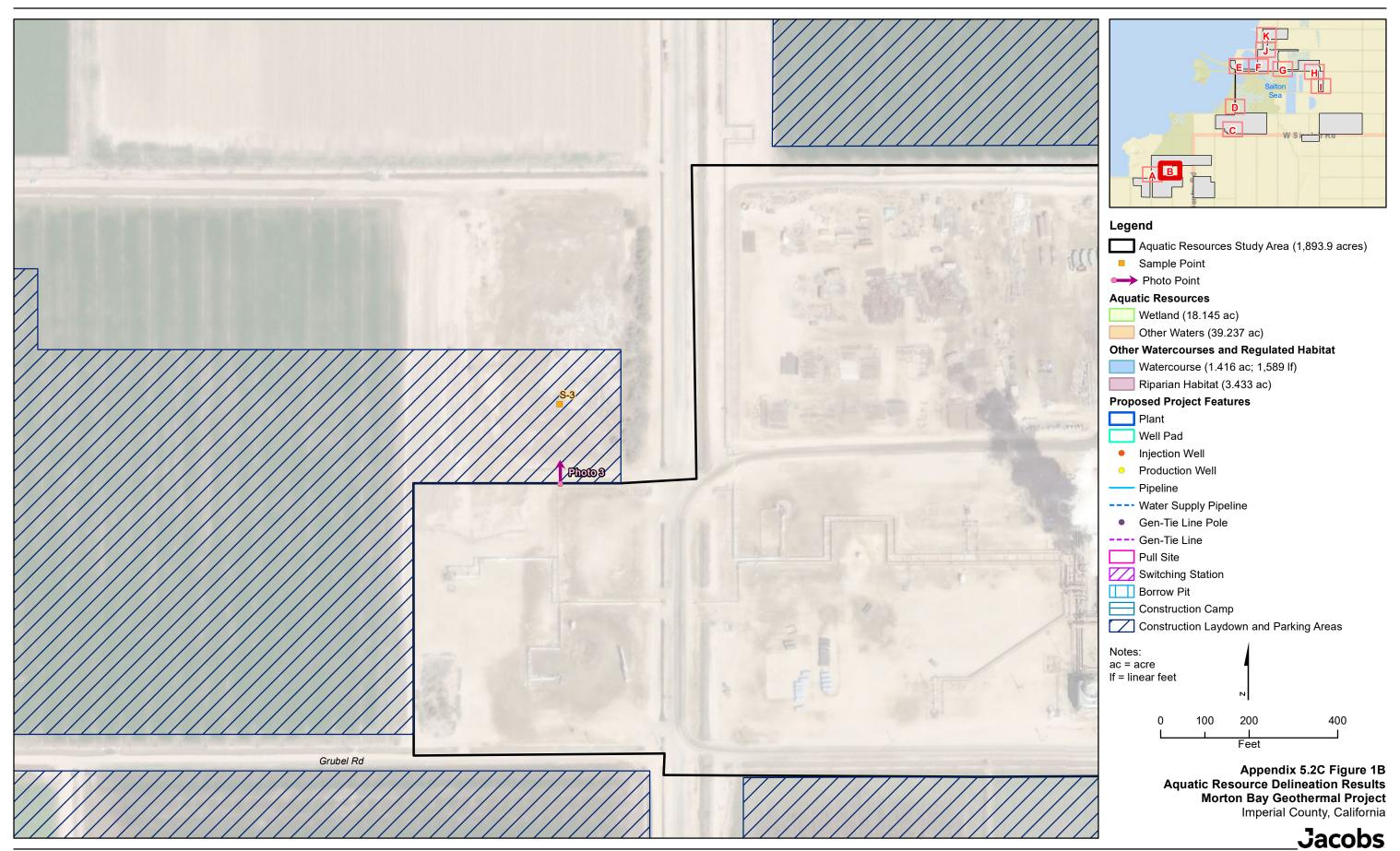
This Appendix is filed under a request for confidential designation

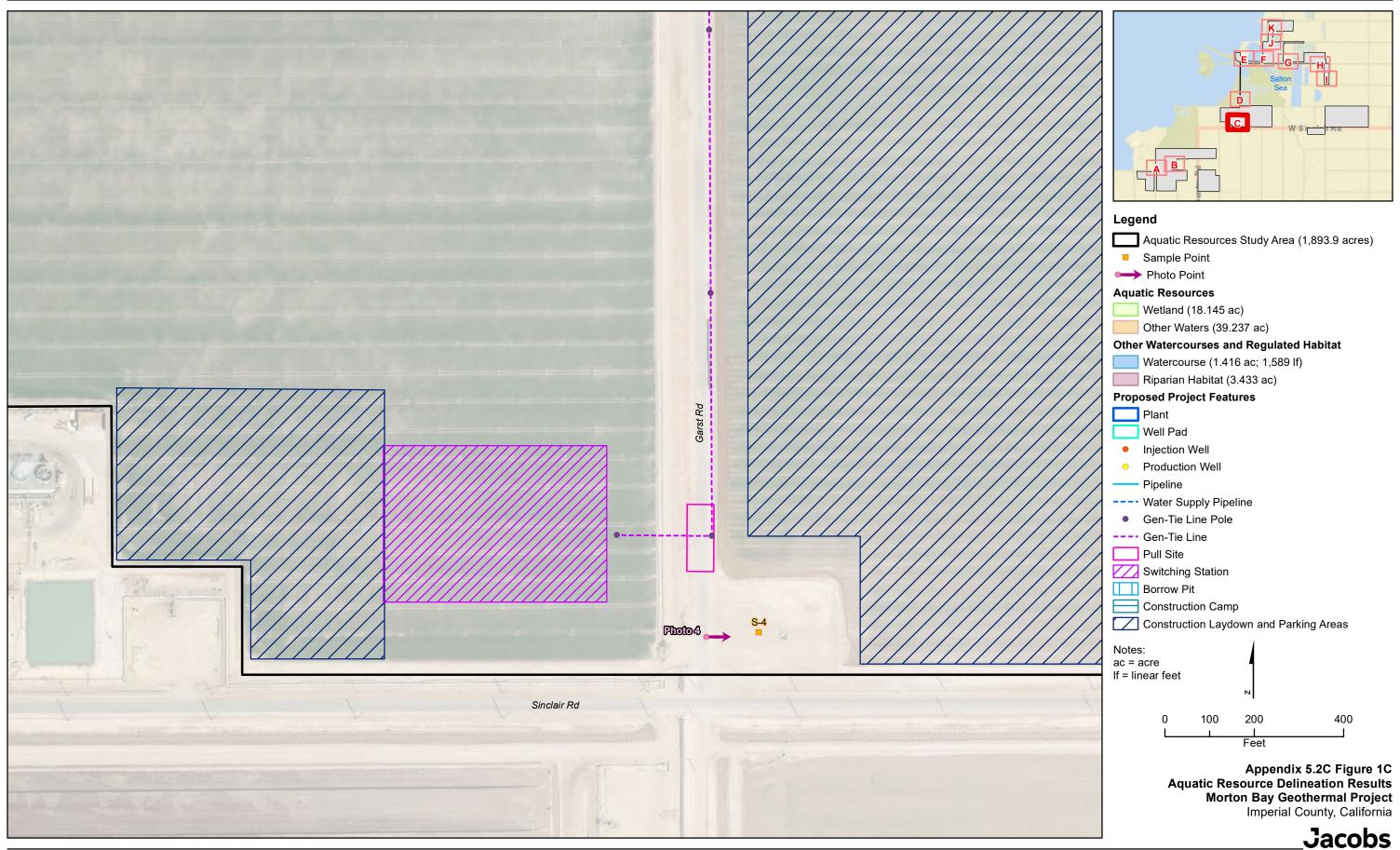
Appendix 5.2 B, Confidential Figures have been provided under a request for confidentiality.

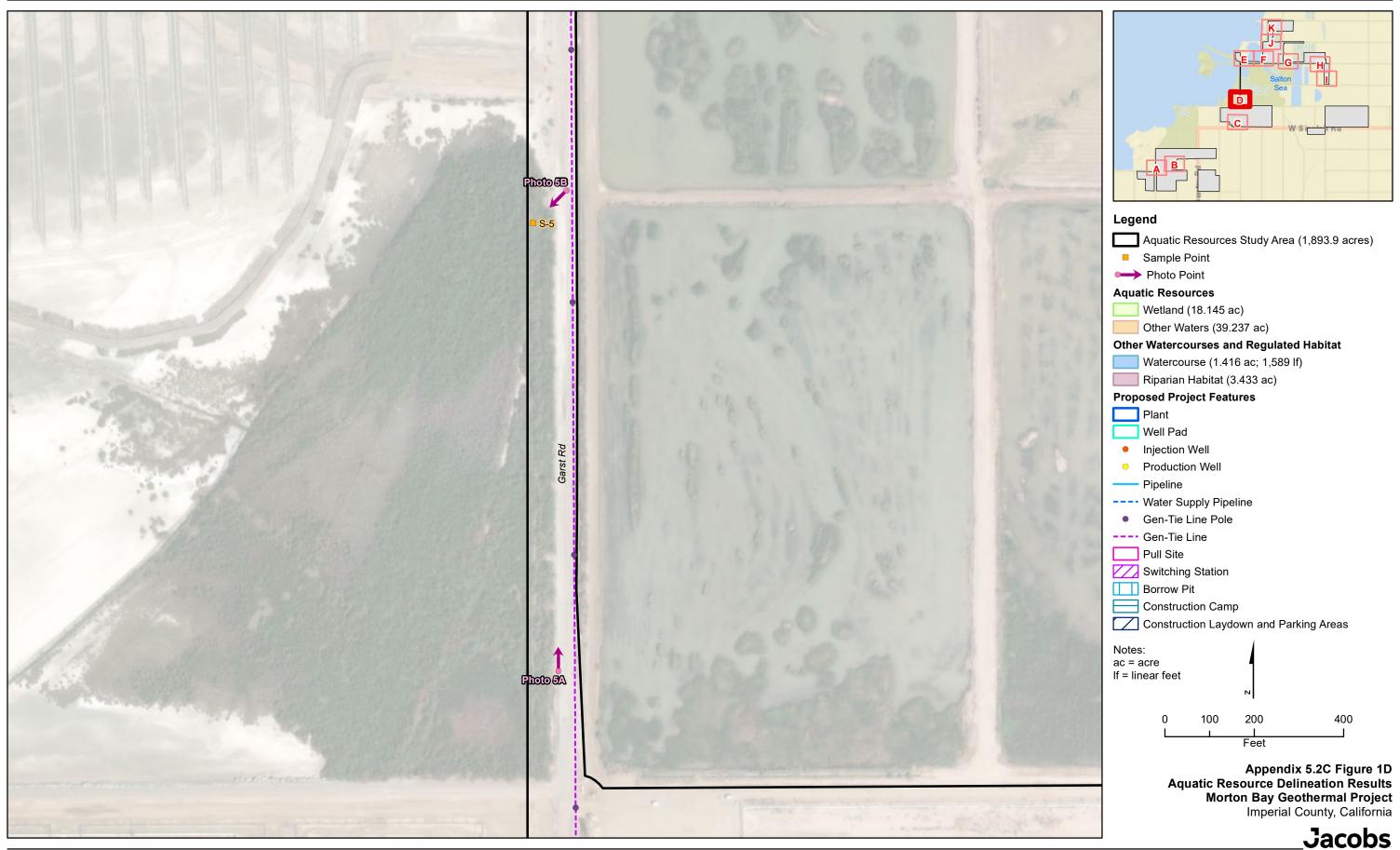
Appendix 5.2C Aquatic Resource Delineation Documentation

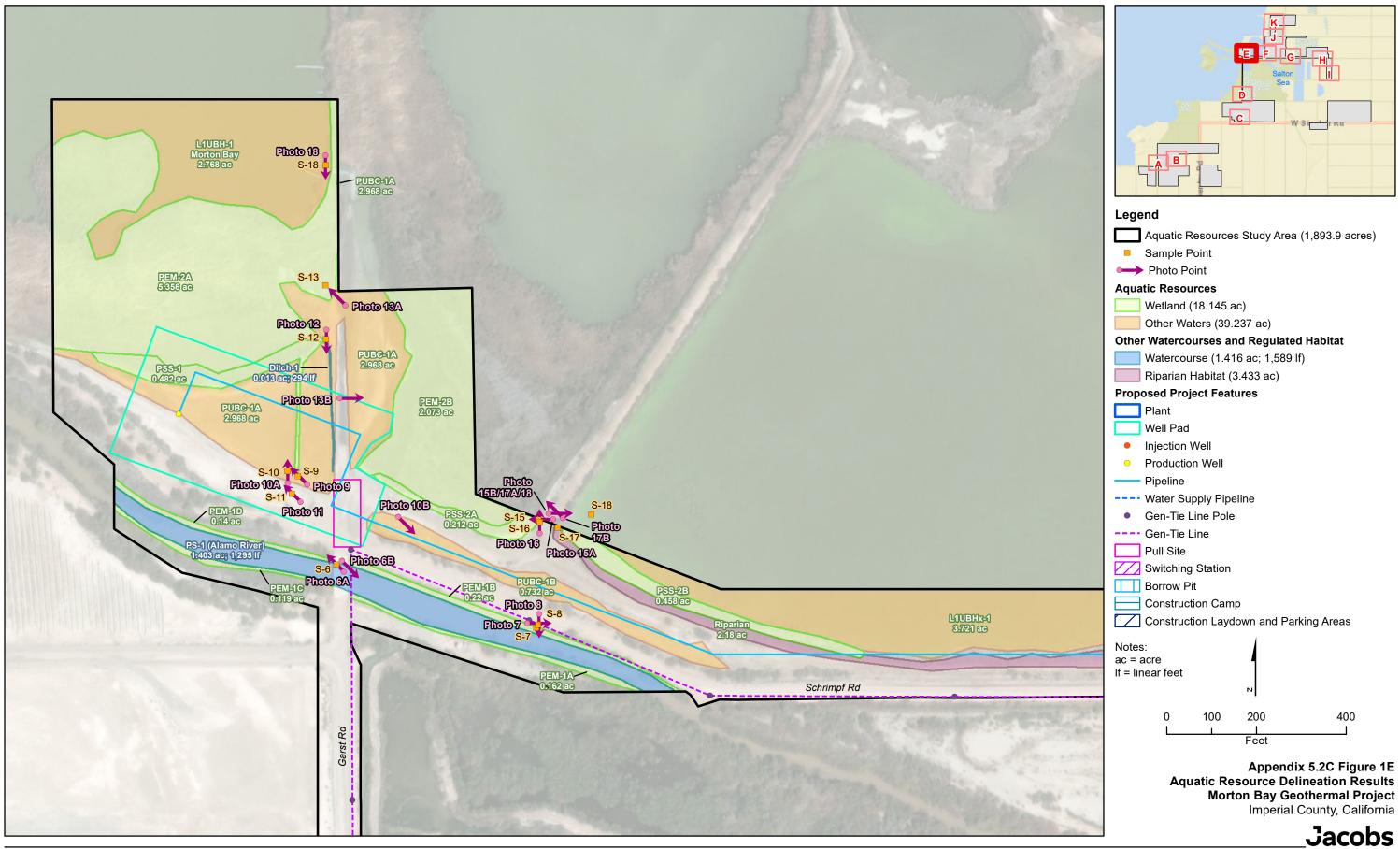


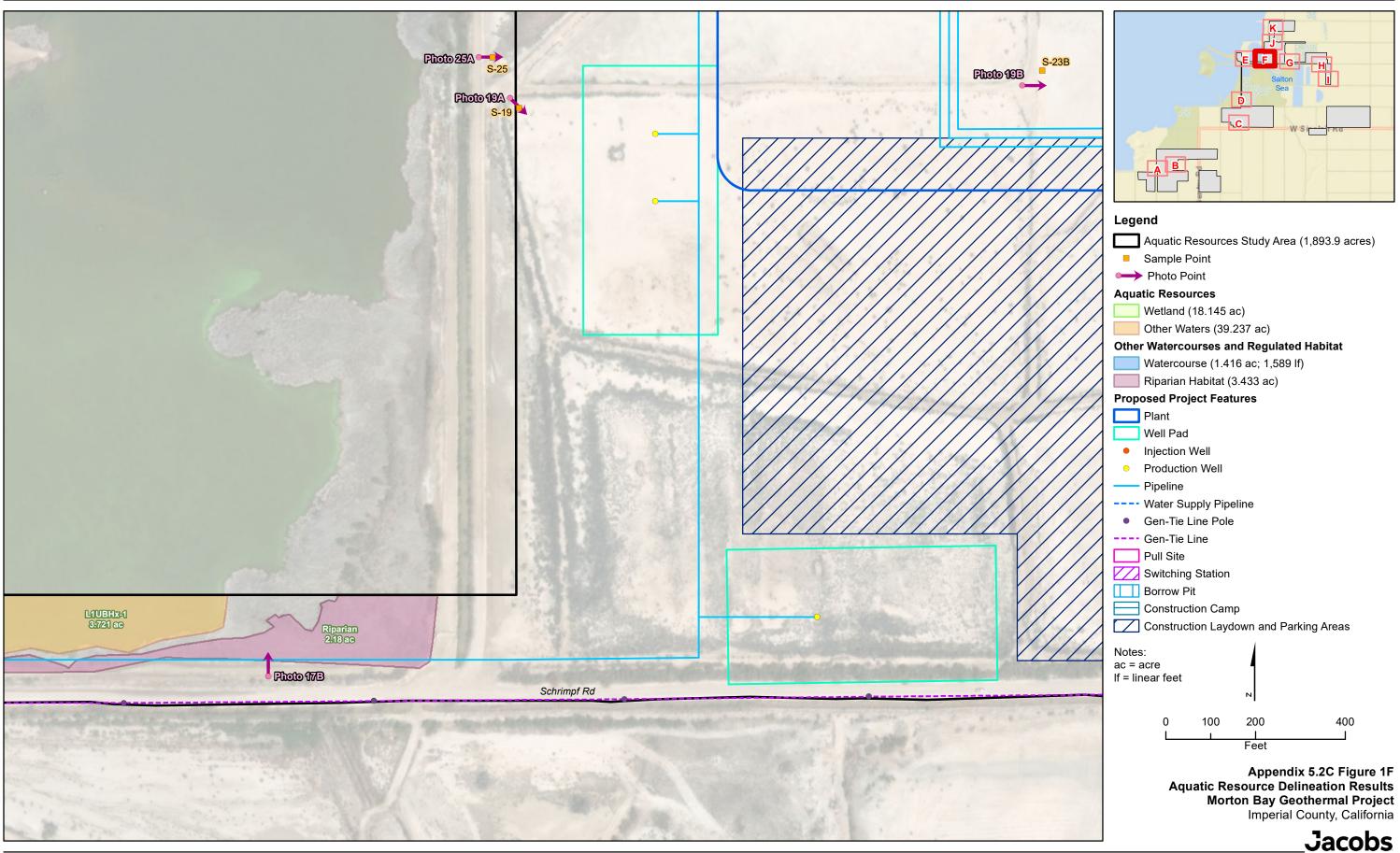


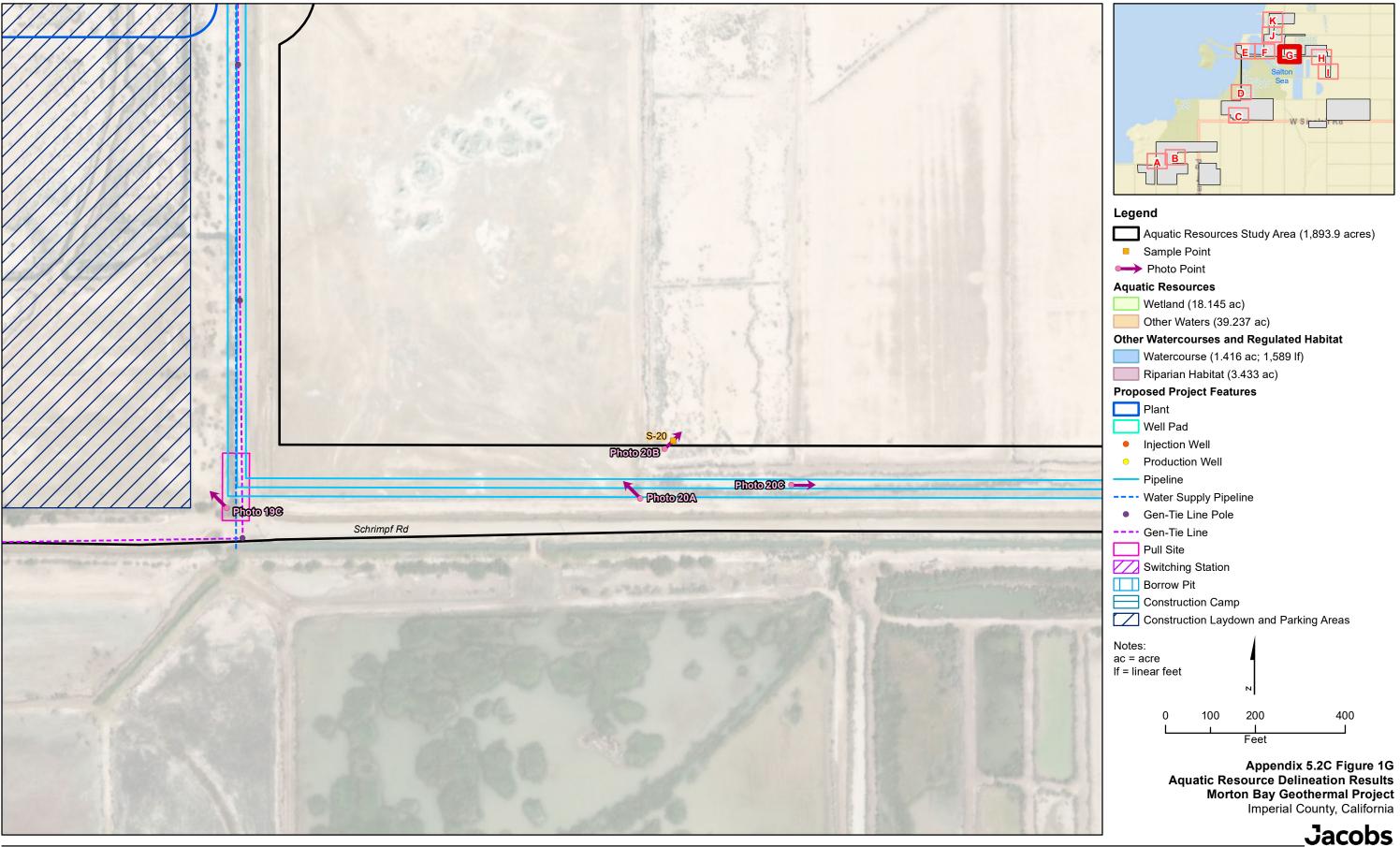


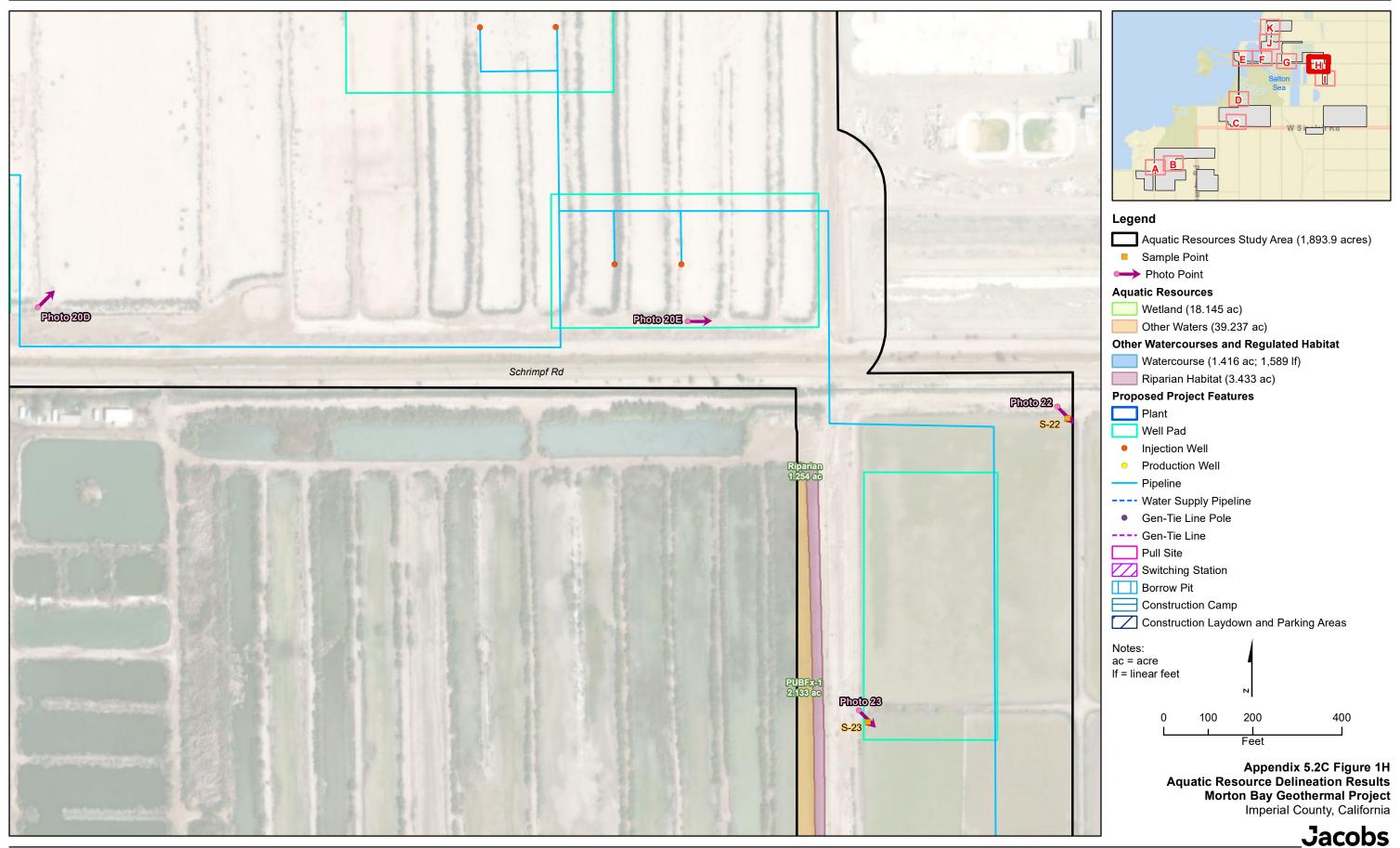


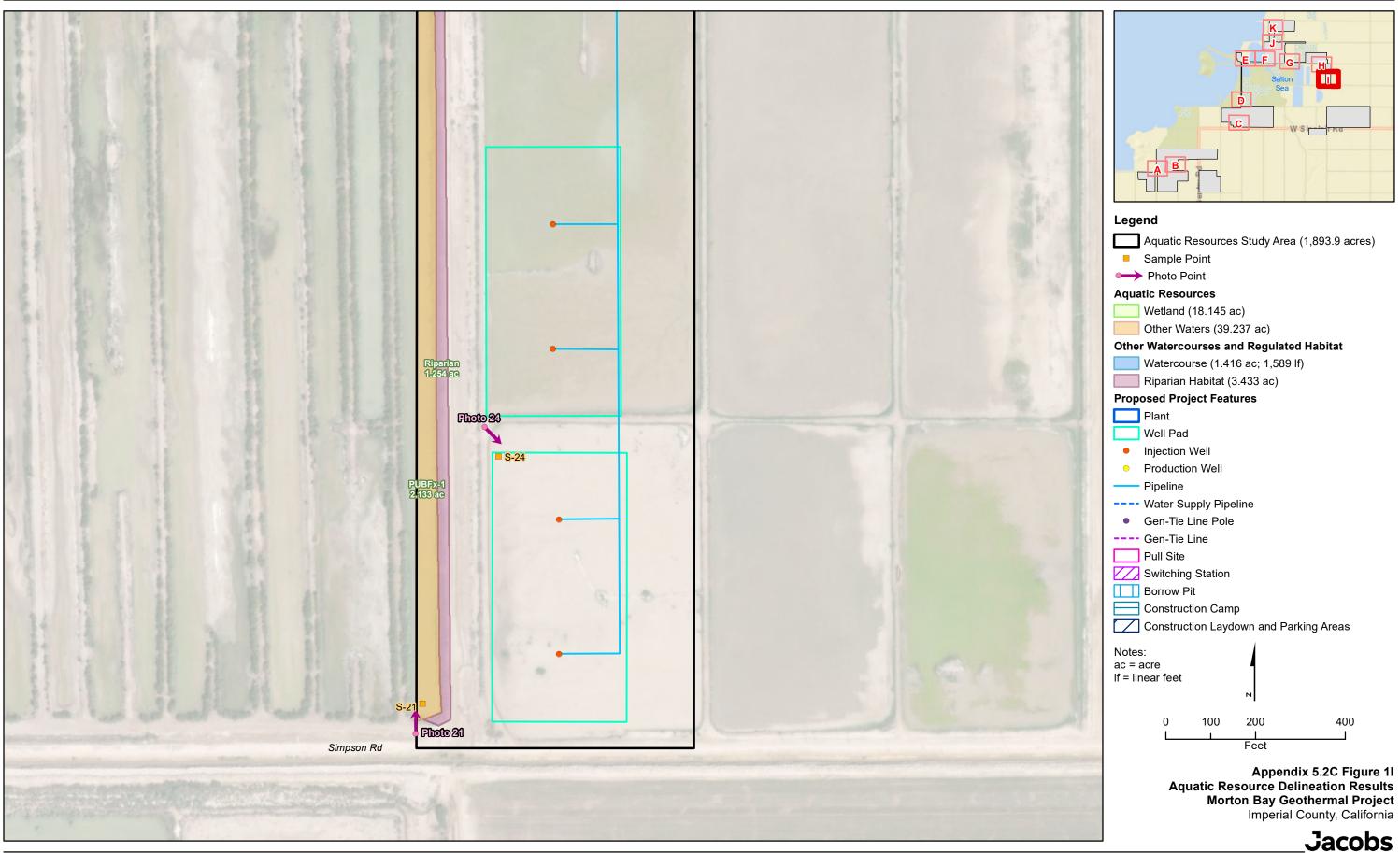


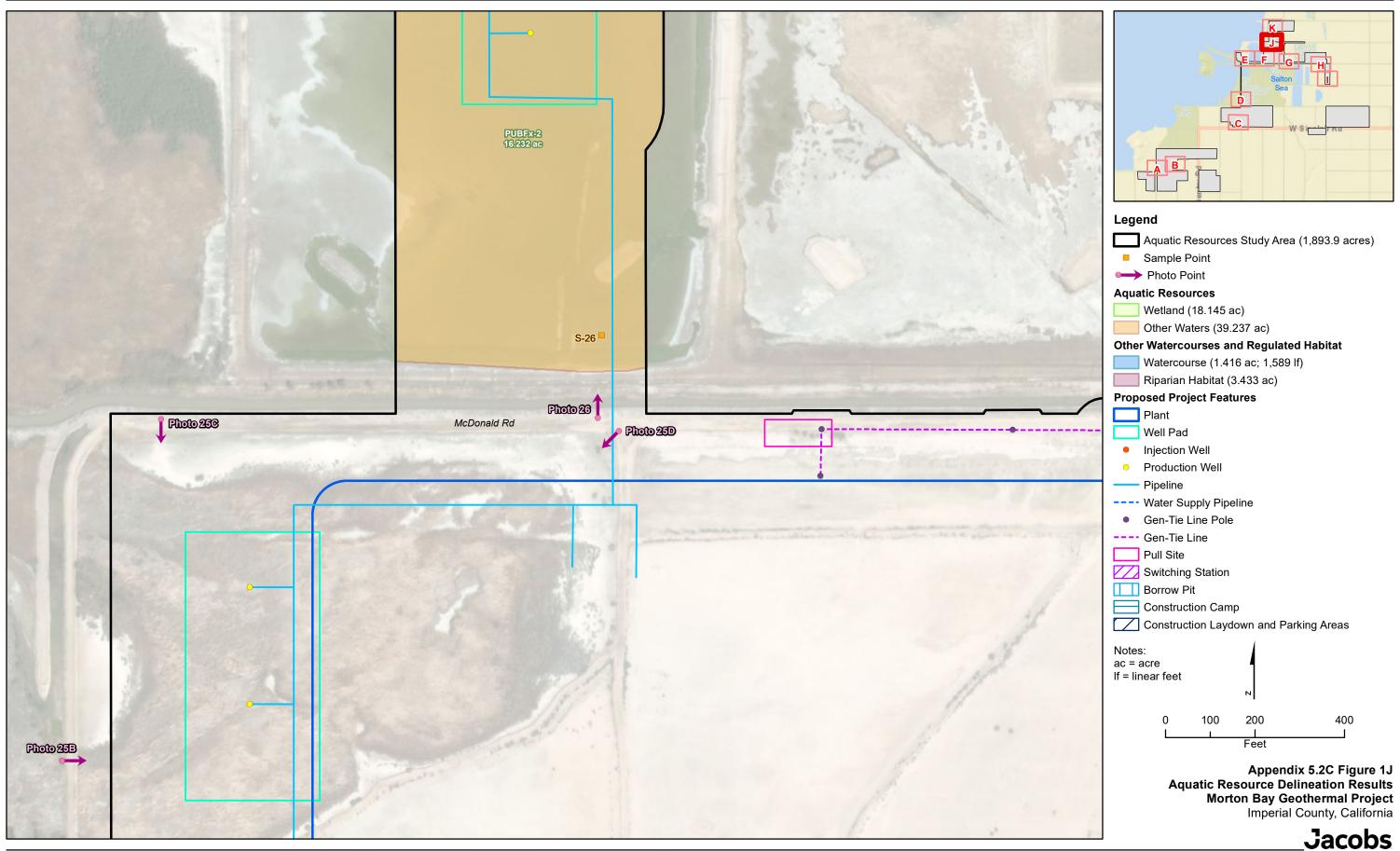












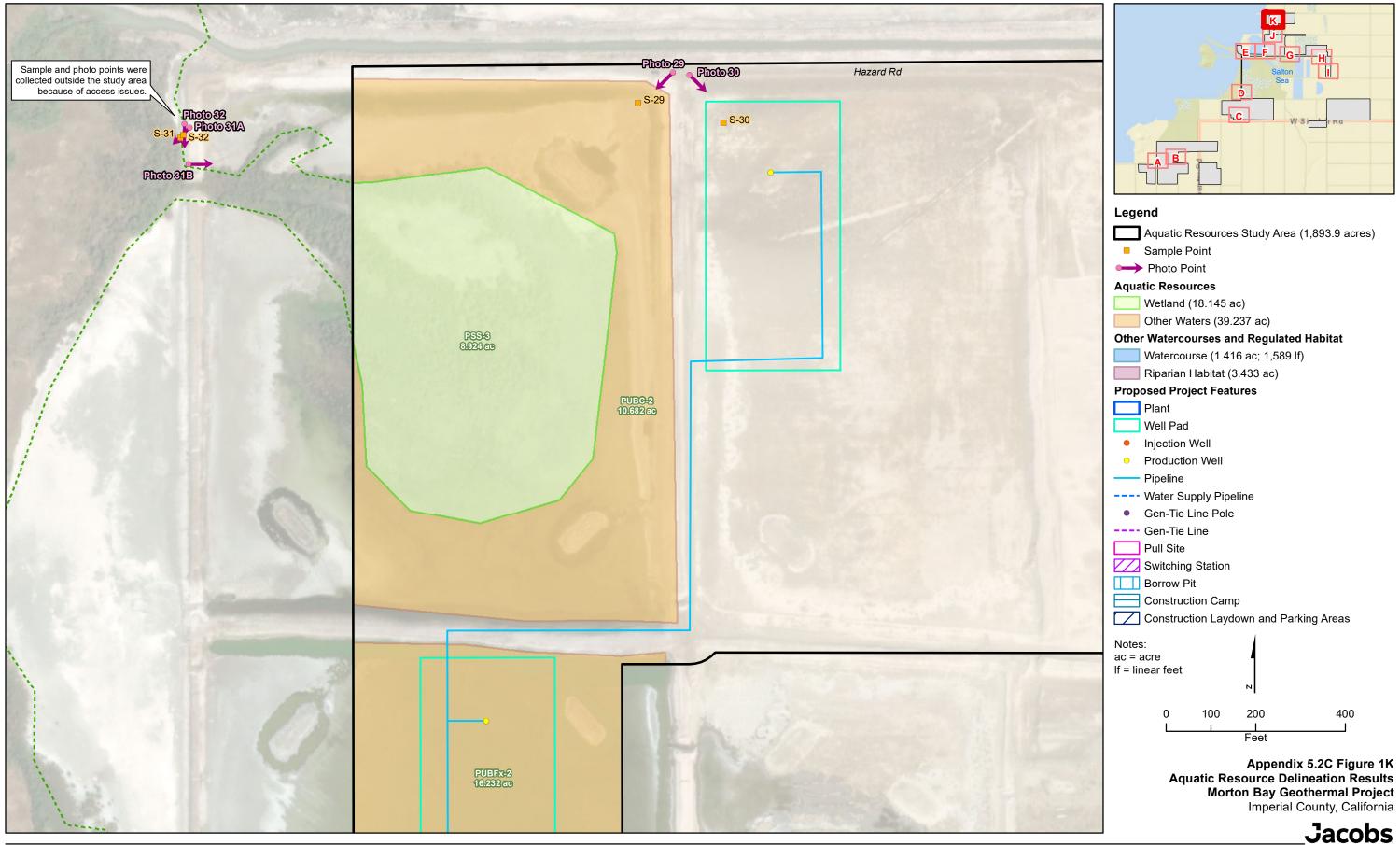




Photo 1: View to the north at **Sample Point 1.** Photo shows an area mapped by National Wetland Inventory (NWI) as a seasonally flooded palustrine excavation with unconsolidated shore (PUSCx), but no wetland indicators are present.



Photo 2: View to the west at **Sample Point 2.** Photo shows an area mapped by NWI as PUSCx, but no wetland indicators are present.



Photo 3: View to the north at **Sample Point 3.** Photo shows an area mapped by NWI as PUSCx, but no wetland indicators are present.



Photo 4: View to the east at **Sample Point 4.** Photo shows an area mapped by NWI as PUSCx, but no wetland indicators are present.



Photo 5A: View to the north at **Sample Point 5.** Photo shows an area mapped by NWI as palustrine scrub-shrub (PSS) and by National Hydrography Dataset (NHD) as an intermittent lake/pond, but no hydrology indicators are present.



Photo 5B: View to the southwest at **Sample Point 5.** Photo shows an area mapped by NWI as PSS and by NHD as an intermittent lake/pond, but no hydrology indicators are present.



Photo 6A: View to the northwest at **Sample Point 6.** Photo shows the NHD- and NWI-mapped perennial stream **PS-1**, **Alamo River**, flowing southeast to northwest towards the Salton Sea, with fringe palustrine emergent wetland PEM-1.



Photo 6B: View to the southeast at **Sample Point 6.** Photo shows the NHD- and NWI-mapped perennial stream **PS-1**, **Alamo River**, flowing southeast to northwest towards the Salton Sea, with fringe palustrine emergent wetland PEM-1.



Photo 7: View to the south at **Sample Point 7.** Photo shows fringe palustrine emergent wetland **PEM-1** on the banks of PS-1 Alamo River.



Photo 8: View to the east at **Sample Point 8.** Photo shows the paired upland point for Sample Point 7.



Photo 9: View to the northwest at **Sample Point 9.** The photo shows fringe/depressional palustrine scrub-shrub wetland **PSS-1** on Morton Bay.



Photo 10A: View to the north at **Sample Point 10.** The photo shows palustrine seasonally flooded salt flat **PUBC-1A** abutting PSS-1 and Morton Bay.



Photo 10B: View to the southeast of **PUBC-1B** separated by a road from PSS-2.



Photo 11: View to the northwest at **Sample Point 11.** Photo shows the paired upland point for Sample Point 9 and Sample Point 10.



Photo 12: View to the south at **Sample Point 12.** Photo shows **Ditch-1**, a manmade drainage leading from PUBC-1A to Morton Bay.



Photo 13A: View to the northwest at **Sample Point 13.** Photo shows fringe palustrine emergent wetland **PEM-2A** on Morton Bay.



Photo 13B: View to the east at **Sample Point 13.** Photo shows fringe palustrine emergent wetland **PEM-2B** (background) and **PUBC-1A** (foreground).



Photo 14: View to the south at Sample Point 14. The photo shows NWI-mapped L1UBH-1, Morton Bay.



Photo 15A: View to the west at **Sample Point 15.** The photo shows fringe palustrine scrubshrub wetland **PSS-2A** on L1UBH-1, Morton Bay.



Photo 15B/17/18: View to the east of palustrine scrub shrub PSS-2B, riparian fringe (Sample Point 17), and L1UBHx-1 (Sample Point 18).



Photo 16: View to the north at **Sample Point 16.** The photo shows the paired upland point for Sample Point 15.



Photo 17B: View to the north of riparian area along L1UBHx-1.



Photo 19A: View to the southeast at **Sample Point 19.** The area is NWI-mapped as PUSCx and NHD-mapped as an intermittent reservoir. Surface soil cracks and hydric soils are likely relictual.



Photo 19B: View to the east of abandoned industrial pond mapped by NWI as PUSCx and by NHD as an intermittent reservoir. Surface soil cracks and hydric soils are likely relictual.



Photo 19C: View to the northwest of an abandoned industrial pond mapped by NWI as PUSCx and by NHD as an intermittent reservoir. Surface soil cracks and hydric soils are likely relictual.



Photo 20A: View to the northwest of an abandoned industrial pond mapped by NHD as an intermittent reservoir, but lacking hydric soil indicators. Surface soil cracks are likely relictual from historical hydrologic regime.



Photo 20B: View to the northeast at **Sample Point 20.** The area is NWI-mapped as PUSCx and NHD-mapped as an intermittent reservoir, but no hydric soil indicators are present. Surface soil cracks are likely relictual from historical hydrologic regime.



Photo 20C: View to the east of an abandoned industrial pond. The area is NWI-mapped as PUSCx and NHD-mapped as an intermittent reservoir, but no hydric soil indicators are present. Surface soil cracks are likely relictual from historical hydrologic regime.



Photo 20D: View to the northeast of an abandoned industrial pond. The area is NWI-mapped as PUSCx and NHD-mapped as an intermittent reservoir, but no hydric soil indicators are present. Surface soil cracks are likely relictual from historical hydrologic regime.



Photo 20E: View to the north of an abandoned industrial pond. The area is NWI-mapped as PUSCx and NHD-mapped as an intermittent reservoir, but no hydric soil indicators are present. Surface soil cracks are likely relictual from historical hydrologic regime.



Photo 21: View to the north at **Sample Point 21.** Photo shows NWI-mapped semipermanently flooded palustrine excavation **PUBFx-1** with fringe riparian area.



Photo 22: View to the southeast at **Sample Point 22.** Photo shows area mapped by NWI as a seasonally flooded palustrine excavation and by NHD as an intermittent reservoir. This area is managed for waterfowl hunting and lacks hydric soil indicators.



Photo 23: View to the southeast at **Sample Point 23.** Photo shows area mapped by NWI as a seasonally flooded palustrine excavation and by NHD as an intermittent reservoir. This area is managed for waterfowl hunting and lacks hydric soil indicators.



Photo 24: View to the southeast at **Sample Point 24.** Photo shows area mapped by NWI as a seasonally flooded palustrine excavation and by NHD as an intermittent reservoir. This area is managed for waterfowl hunting and lacks hydric soil indicators.



Photo 25A: View to the east at **Sample Point 25.** The photo shows an area previously qualifying as a wetland, but construction of the O-N Drain Connector in 2019 severed hydrologic connectivity.



Photo 25B: View to the east of area previously qualifying as a wetland, but construction of the O-N Drain Connector in 2019 severed hydrologic connectivity.



Photo 25C: View to the south of area previously qualifying as a wetland, but construction of the O-N Drain Connector in 2019 severed hydrologic connectivity.



Photo 25D: View to the southwest of area previously qualifying as a wetland, but construction of the O-N Drain Connector in 2019 severed hydrologic connectivity.



Photo 26: View to the north at **Sample Point 26.** The photo shows NWI-mapped semipermanently flooded palustrine excavation **PUBFx-2** (background).



Photo 27A: View to the southwest at **Sample Point 27.** The photo shows depressional palustrine scrub-shrub wetland **PSS-3** in area mapped by NWI as L2USCx/L2UBFx.



Photo 27B: View to the east of depressional palustrine scrub-shrub wetland **PSS-3** in area mapped by NWI as L2USCx/L2UBFx.



Photo 28: View to the south at **Sample Point 28.** Photo shows the paired upland point for Sample Point 27.



Photo 29: View to the southwest at **Sample Point 29.** The photo shows palustrine seasonally flooded salt flat **PUBC-2**. The area is NWI-mapped as L2USCx, but surface water lacks sufficient coverage and depth.



Photo 30: View to the southeast at **Sample Point 30.** Photo shows an area mapped by NWI as L2USCx and by NHD as an intermittent reservoir, but no indicators are present.

Project/Site: Morton Bay Geothermal Project	City/C	County: Imperial	County	San	npling Date: _	3/1/22
Applicant/Owner: Morton Bay Geothermal LLC			State:(CA San	npling Point: _	S-1
Investigator(s): R. Newton, R. John	Section	on, Township, Ra	inge: <u>S33 T11S R</u>	13E		
Landform (hillslope, terrace, etc.): manmade terrace	Loca	I relief (concave,	convex, none): no	ne	Slop	e (%):0
Subregion (LRR): <u>D - Interior Deserts</u>	Lat: 33.1623	91°	Long: -115.631	L209°	Datun	n: WGS84
Soil Map Unit Name: Imperial-Glenbar silty clay loams			=			
Are climatic / hydrologic conditions on the site typical for thi						
Are Vegetation, Soil, or Hydrology			"Normal Circumsta			No
Are Vegetation, Soil, or Hydrology			eeded, explain any			
SUMMARY OF FINDINGS – Attach site map						atures, etc.
	. /		·	-	<u> </u>	<u> </u>
Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N		Is the Sampled			,	
Wetland Hydrology Present? Yes N		within a Wetla	nd? Ye	s	No <u>√</u>	
Remarks:						
Area mapped by NWI as a seasonally flood	ed palustrine	excavation (PUSCx), but no	o wetland	d indicators	are
present. The Antecedent Precipitation Tool	•	•	• •			
VEGETATION – Use scientific names of plar	nte					
VEGETATION – Ose scientific flames of plan		ninant Indicator	Dominance Tes	t workshee	at·	
Tree Stratum (Plot size:)	% Cover Spe		Number of Dom			
1			That Are OBL, F			(A)
2			Total Number of	Dominant		
3			Species Across	All Strata:	1	(B)
4			Percent of Domi			
Sapling/Shrub Stratum (Plot size: 15' radius)	= To	ital Cover	That Are OBL, F	ACW, or FA	NC: <u>0</u>	(A/B)
1. Atriplex lentiformis	20	Y FACU	Prevalence Ind	ex workshe	et:	
2			Total % Cov	/er of:	Multiply	by:
3			OBL species			
4			FACW species			
5		4-1-0	FAC species FACU species			
Herb Stratum (Plot size: 5' radius)	= To	ital Cover	UPL species			
1			Column Totals:			80 (B)
2					_ , ,	
3					/A =4.	0
4			Hydrophytic Ve			
5			Dominance			
6			Prevalence		บ ons¹ (Provide s	cupporting
7					on a separate s	
8	0 = To		Problemation	Hydrophyti	c Vegetation¹ ((Explain)
Woody Vine Stratum (Plot size:)		ital Covel				
1			¹ Indicators of hy be present, unle			
2			' '	ss disturbed	i di pioblemati	С .
	= To	tal Cover	Hydrophytic Vegetation			
% Bare Ground in Herb Stratum 100 % Cove	er of Biotic Crust _	0	Present?	Yes	No <u>v</u>	<u>/</u>
Remarks:			•			

Depth	Matrix		Redox	K Features	s			
(inches)	Color (moist)	<u> </u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks Remarks
0 - 3	7.5 YR 4/3	100					SiLo	~40% gravels/fill
3 - 18	7.5 YR 4/3	100					SiLo	
<u> </u>	7.0, 0				-		0.20	
	oncentration, D=Dep					d Sand Gr		cation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless other	wise note	ed.)		Indicators	s for Problematic Hydric Soils ³ :
Histosol			Sandy Redo					Muck (A9) (LRR C)
-	oipedon (A2)		Stripped Ma					Muck (A10) (LRR B)
	stic (A3)		Loamy Mucl	-	. ,			ced Vertic (F18)
	en Sulfide (A4)	0 \	Loamy Gley		(F2)			Parent Material (TF2)
	d Layers (A5) (LRR uck (A9) (LRR D)	C)	Depleted Ma Redox Dark		(E6)		Other	(Explain in Remarks)
	d Below Dark Surfac	·Δ (Δ11)	Redox Dark	,	. ,			
	ark Surface (A12)	C (ATT)	Redox Depr		, ,		3Indicators	s of hydrophytic vegetation and
	Mucky Mineral (S1)		Vernal Pools		. 0)			hydrology must be present,
-	Gleyed Matrix (S4)		<u> </u>	- ()				disturbed or problematic.
	Layer (if present):							·
Type:								
Depth (in	ches):						Hydric Soi	I Present? Yes No ✓
Remarks:			<u> </u>				, ,	
r comanc.								
Construct	ted area							
HYDROLO	GY							
Wetland Hy	drology Indicators							
Primary India	cators (minimum of	one required;	check all that apply	()			Seco	ndary Indicators (2 or more required)
-	Water (A1)	• •	Salt Crust					Water Marks (B1) (Riverine)
	ater Table (A2)		Biotic Crus					Sediment Deposits (B2) (Riverine)
Saturation	• •		Aquatic Inv		s (B13)			Orift Deposits (B3) (Riverine)
	larks (B1) (Nonrive i	rine)	Hydrogen \$					Orainage Patterns (B10)
	nt Deposits (B2) (No					Living Roc		Ory-Season Water Table (C2)
	posits (B3) (Nonrive		Presence of		_	-		Crayfish Burrows (C8)
	Soil Cracks (B6)		Recent Iron					Saturation Visible on Aerial Imagery (C9)
	on Visible on Aerial	Imagery (B7)				u 00110 (00		Shallow Aguitard (D3)
·	tained Leaves (B9)	magory (Dr)	Other (Exp					FAC-Neutral Test (D5)
Field Obser			Other (Exp		inano,	1		7.0 (1000 (100)
Surface Wat		/os N	o <u>✓</u> Depth (inc	shoe):				
Water Table			o <u>√</u> Depth (inc			l l		D 10 Y
Saturation P (includes car		'es N	o <u>✓</u> Depth (inc	:hes):		_ Wetia	and Hydrolog	gy Present? Yes No✓
	corded Data (stream	n gauge, mon	itoring well, aerial p	hotos, pr	evious ins	pections).	if available:	
	•	· ·	- '	* •		. "		
Remarks:								
. tomanto.								

Project/Site: Morton Bay Geothermal Project	City/County: Imperial	County	Sampling Date: 3/1/22
Applicant/Owner: Morton Bay Geothermal LLC		State: CA	Sampling Point: S-2
Investigator(s): R. Newton, R. John	Section, Township, Ra	nge: <u>S33 T11S R13E</u>	
Landform (hillslope, terrace, etc.): manmade terrace	Local relief (concave,	convex, none): none	Slope (%):0
Subregion (LRR): D - Interior Deserts	Lat: _33.163147°	Long: -115.630995°	Datum: WGS84
Soil Map Unit Name: Imperial-Glenbar silty clay loams,		-	
Are climatic / hydrologic conditions on the site typical for this			
Are Vegetation, Soil _ ✓ _, or Hydrology signature.	•		resent? Yes <u>√</u> No
Are Vegetation, Soil, or Hydrology na		eeded, explain any answer	
SUMMARY OF FINDINGS – Attach site map s			
	,		, important routares, etc.
Hydrophytic Vegetation Present? Yes No		l Area	
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No		nd? Yes	No <u>√</u>
Remarks:	/ <u> </u>		
Area mapped by NWI as a seasonally flooded	d nalustrine excavation (I	PUSCx), but no wet!	and indicators are
present. The Antecedent Precipitation Tool of	•	• • • • • • • • • • • • • • • • • • • •	
VEGETATION – Use scientific names of plant			1 3
<u> </u>	Absolute Dominant Indicator	Dominance Test works	shoot:
	% Cover Species? Status	Number of Dominant Sp	
1		That Are OBL, FACW, o	or FAC:0 (A)
2		Total Number of Domina	ant
3		Species Across All Strat	ta: <u>1</u> (B)
4		Percent of Dominant Sp	
Sapling/Shrub Stratum (Plot size: 15' radius)	= Total Cover	That Are OBL, FACW, o	or FAC:0 (A/B)
1. Atriplex lentiformis	<u>20</u> <u>Y</u> <u>FACU</u>	Prevalence Index work	ksheet:
2		Total % Cover of:	Multiply by:
3			x 1 =
4			x 2 =
5			x 3 = x 4 =80
Herb Stratum (Plot size: 5' radius)	= Total Cover	*	x 5 =
1		Column Totals: 20	
2			
3			= B/A = <u>4.0</u>
4		Hydrophytic Vegetatio	
5		Dominance Test is	
6		Prevalence Index is	s ≤3.0 otations¹ (Provide supporting
7			s or on a separate sheet)
8	0 = Total Cover	Problematic Hydrop	ohytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size:)			
1		¹ Indicators of hydric soil be present, unless distu	and wetland hydrology must
2			indea or problematic.
	= Total Cover	Hydrophytic Vegetation	
% Bare Ground in Herb Stratum 100 % Cover	of Biotic Crust0		s No_ <u>√</u>
Remarks:			

Depth	Matrix		Redox	K Features	s			
(inches)	Color (moist)	<u> </u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks Remarks
0 - 3	7.5 YR 4/3	100					SiLo	~40% gravels
3 - 18	7.5 YR 4/3	100					SiLo	
								·
	_							
	oncentration, D=Dep					d Sand Gr		cation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless other	wise note	ed.)		Indicators	s for Problematic Hydric Soils ³ :
Histosol			Sandy Redo					Muck (A9) (LRR C)
-	pipedon (A2)		Stripped Ma					Muck (A10) (LRR B)
	istic (A3)		Loamy Mucl	-				ced Vertic (F18)
	en Sulfide (A4)	0 \	Loamy Gley		(F2)			Parent Material (TF2)
	d Layers (A5) (LRR uck (A9) (LRR D)	C)	Depleted Ma Redox Dark		(E6)		Other	(Explain in Remarks)
	d Below Dark Surfac	·Δ (Δ11)	Redox Dark	,	. ,			
	ark Surface (A12)	C (ATT)	Redox Depr		, ,		3Indicators	s of hydrophytic vegetation and
	Aucky Mineral (S1)		Vernal Pools		. 0)			hydrology must be present,
-	Gleyed Matrix (S4)		<u> </u>	- ()				disturbed or problematic.
	Layer (if present):							·
Type:								
Depth (in	ches):						Hydric Soi	I Present? Yes No ✓
Remarks:			<u> </u>				, ,	
r comanc.								
Construct	ted area							
HYDROLO	GY							
Wetland Hy	drology Indicators							
Primary India	cators (minimum of	one required;	check all that apply	()			Seco	ndary Indicators (2 or more required)
-	Water (A1)	• •	Salt Crust					Water Marks (B1) (Riverine)
	ater Table (A2)		Biotic Crus					Sediment Deposits (B2) (Riverine)
Saturation	, ,		Aquatic Inv		s (B13)			Orift Deposits (B3) (Riverine)
	larks (B1) (Nonrive i	rine)	Hydrogen \$					Orainage Patterns (B10)
	nt Deposits (B2) (No					Living Roc		Ory-Season Water Table (C2)
	posits (B3) (Nonrive		Presence of		_	-		Crayfish Burrows (C8)
	Soil Cracks (B6)		Recent Iron					Saturation Visible on Aerial Imagery (C9)
	on Visible on Aerial	Imagery (B7)				u 00110 (00		Shallow Aguitard (D3)
·	stained Leaves (B9)	magory (Dr)	Other (Exp					FAC-Neutral Test (D5)
Field Obser			Other (EXP		marko)		<u> </u>	, to Hodda 1001 (20)
Surface Wat		/oc N	o <u>✓</u> Depth (inc	hee).				
			o <u> </u>					
Water Table						l l		D 10 Y
Saturation P (includes car		'es N	o <u>✓</u> Depth (inc	:hes):		_ Wetia	and Hydrolog	gy Present? Yes No✓
	corded Data (stream	n gauge, mon	itoring well, aerial p	hotos, pr	evious ins	pections).	if available:	
	•	- -	- '	• •		,,		
Remarks:								
. tomanto.								

Project/Site: Morton Bay Geothermal Project	City/County: Imperial	County	Sampling Date: 3/1/22
Applicant/Owner: Morton Bay Geothermal LLC		State: CA	Sampling Point: S-3
Investigator(s): R. Newton, R. John	Section, Township, Rai	nge: <u>S33 T 1S R13E</u>	
Landform (hillslope, terrace, etc.): <u>cleared dirt parkin</u>	g lot? Local relief (concave, o	convex, none): none	Slope (%):0
Subregion (LRR): D - Interior Deserts	Lat: 33.164302°	Long: -115.623849°	Datum: WGS84
Soil Map Unit Name: Holtville silty clay, wet	-	NWI classific	ation: PUSCx
Are climatic / hydrologic conditions on the site typical for			
Are Vegetation _ ✓ _, Soil, or Hydrology	•		
Are Vegetation, Soil, or Hydrology		eeded, explain any answe	
SUMMARY OF FINDINGS – Attach site ma			
SUMMART OF FINDINGS - Attach site in		——————————————————————————————————————	, important leatures, etc.
	No √ Is the Sampled	l Area	
	No / within a Wetlar	nd? Yes	No <u>√</u>
Wetland Hydrology Present? Yes	_ No <u>▼</u>		
Area mapped by NWI as a seasonally floo	adad nalustrina avsavation /[DUSCy) but no wot	land indicators are
present. The Antecedent Precipitation To		• • • • • • • • • • • • • • • • • • • •	
		dier than norman	at the time of sampling.
VEGETATION – Use scientific names of p			
Tree Stratum (Plot size:)	Absolute Dominant Indicator <u>% Cover Species? Status</u>	Dominance Test work	
1		Number of Dominant Sp That Are OBL, FACW, of	or FAC: 0 (A)
2.		Total Number of Domin	ant
3		Species Across All Stra	
4		Percent of Dominant Sp	pecies
Sapling/Shrub Stratum (Plot size:)	= Total Cover		or FAC:0 (A/B)
1		Prevalence Index wor	ksheet:
2.		Total % Cover of:	Multiply by:
3		OBL species	x 1 =
4			x 2 =
5			x 3 =
Herb Stratum (Plot size: 5' radius)	= Total Cover	1	x 4 =
1		UPL species	
2.		Column Totals.	(A) (B)
3			= B/A =
4		Hydrophytic Vegetation	
5		Dominance Test is	
6		Prevalence Index is	
7			ptations ¹ (Provide supporting s or on a separate sheet)
8		Problematic Hydro	phytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)	= Total Cover		
1.			l and wetland hydrology must
2		be present, unless distu	irbed or problematic.
	= Total Cover	Hydrophytic Vegetation	
% Bare Ground in Herb Stratum 100 % Co	over of Biotic Crust0		s No_ <u>√</u>
Remarks:		1	
No vegetation present. Area has been c	leared of vegetation and ma	ay serve as parking	for neighboring
industries.		.,	

US Army Corps of Engineers

	th needed to document the indicator or	r confirm the absence of	of indicators.)
Depth Matrix (inches) Color (moist) %	Redox Features Color (moist) % Type ¹	Loc ² Texture	Remarks
			Velligiva
0 - 18 7.5 YR 4/3 100		SiLo	
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, CS=Covered or Coated	Sand Grains. ² Loca	ation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all	LRRs, unless otherwise noted.)	Indicators t	for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Redox (S5)	1 cm M	uck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm M	uck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)		ed Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		rent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (I	Explain in Remarks)
1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)Depleted Dark Surface (F7)		
Thick Dark Surface (A11)	Redox Depressions (F8)	³ Indicators of	of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Vernal Pools (F9)		lydrology must be present,
Sandy Gleyed Matrix (S4)			sturbed or problematic.
Restrictive Layer (if present):			·
Type:			
Depth (inches):		Hydric Soil I	Present? Yes No <u>√</u>
Remarks:			
HYDROLOGY			
Wetland Hydrology Indicators:			
Wetland Hydrology Indicators: Primary Indicators (minimum of one required)	l; check all that apply)	Second	dary Indicators (2 or more required)
	l; check all that apply) Salt Crust (B11)		dary Indicators (2 or more required) ater Marks (B1) (Riverine)
Primary Indicators (minimum of one required	, ,,,	W	
Primary Indicators (minimum of one required Surface Water (A1)	Salt Crust (B11)	W	ater Marks (B1) (Riverine)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2)	Salt Crust (B11) Biotic Crust (B12)	W Se Dr	ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li	W. Se Dr Dr iving Roots (C3) Dr	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4)	W. Se Dr Dr iving Roots (C3) Dr Cr	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled	W Se Dr Dr Dr iving Roots (C3) Dr Cr Soils (C6) Se	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7)	W Se Dr Dr iving Roots (C3) Dr Cr Soils (C6) Se	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) aift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) atturation Visible on Aerial Imagery (C9) allow Aquitard (D3)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled	W Se Dr Dr iving Roots (C3) Dr Cr Soils (C6) Se	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations:	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled ') Thin Muck Surface (C7) Other (Explain in Remarks)	William William Se	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) aift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) atturation Visible on Aerial Imagery (C9) allow Aquitard (D3)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7 Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks)	W Se Dr Dr Dr Cr Soils (C6) Se FA	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) aift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) atturation Visible on Aerial Imagery (C9) allow Aquitard (D3)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7 Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled ') Thin Muck Surface (C7) Other (Explain in Remarks)	W Se Dr Dr Dr Cr Soils (C6) Se FA	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) aift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) atturation Visible on Aerial Imagery (C9) allow Aquitard (D3)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes I Saturation Present? Yes I	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks)	W Se Dr Dr iving Roots (C3) Dr Cr Soils (C6) Se Sr FA	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) aift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) atturation Visible on Aerial Imagery (C9) allow Aquitard (D3)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes I Saturation Present? Yes I Saturation Present? Yes I	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks) No ✓ Depth (inches): No ✓ Depth (inches):	- W. Se - Dr - Dr iving Roots (C3) _ Dr _ Cr Soils (C6) _ Se _ Sr _ FA	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) aift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) allow Aquitard (D3) aC-Neutral Test (D5)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes I Saturation Present? Yes I	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks) No ✓ Depth (inches): No ✓ Depth (inches):	- W. Se - Dr - Dr iving Roots (C3) _ Dr _ Cr Soils (C6) _ Se _ Sr _ FA	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) aift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) allow Aquitard (D3) aC-Neutral Test (D5)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes I Saturation Present? Yes I Saturation Present? Yes I (includes capillary fringe) Describe Recorded Data (stream gauge, mo	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks) No ✓ Depth (inches): No ✓ Depth (inches):	- W. Se - Dr - Dr iving Roots (C3) _ Dr _ Cr Soils (C6) _ Se _ Sr _ FA	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) aift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) allow Aquitard (D3) aC-Neutral Test (D5)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes I Saturation Present? Yes I Saturation Present? Yes I	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks) No ✓ Depth (inches): No ✓ Depth (inches):	- W. Se - Dr - Dr iving Roots (C3) _ Dr _ Cr Soils (C6) _ Se _ Sr _ FA	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) aift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) allow Aquitard (D3) aC-Neutral Test (D5)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes I Saturation Present? Yes I Saturation Present? Yes I (includes capillary fringe) Describe Recorded Data (stream gauge, mo	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks) No ✓ Depth (inches): No ✓ Depth (inches):	- W. Se - Dr - Dr iving Roots (C3) _ Dr _ Cr Soils (C6) _ Se _ Sr _ FA	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) aift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) allow Aquitard (D3) aC-Neutral Test (D5)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes I Saturation Present? Yes I Saturation Present? Yes I (includes capillary fringe) Describe Recorded Data (stream gauge, mo	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks) No ✓ Depth (inches): No ✓ Depth (inches):	- W. Se - Dr - Dr iving Roots (C3) _ Dr _ Cr Soils (C6) _ Se _ Sr _ FA	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) aift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) allow Aquitard (D3) aC-Neutral Test (D5)
Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes I Saturation Present? Yes I Saturation Present? Yes I (includes capillary fringe) Describe Recorded Data (stream gauge, mo	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks) No ✓ Depth (inches): No ✓ Depth (inches):	- W. Se - Dr - Dr iving Roots (C3) _ Dr _ Cr Soils (C6) _ Se _ Sr _ FA	ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) aift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) allow Aquitard (D3) aC-Neutral Test (D5)

Project/Site: Morton Bay Geothermal Project	City/County: Imperial	County	Sampling Date: 3/14/22
Applicant/Owner: Morton Bay Geothermal LLC		State: CA	Sampling Point: S-4
Investigator(s): R. Newton, M. King	Section, Township, Ra	inge: <u>S26 T11S R13E</u>	
Landform (hillslope, terrace, etc.): manmade terrace	Local relief (concave,	convex, none): none	Slope (%): <u>0</u>
Subregion (LRR): D - Interior Deserts	Lat: <u>33.177045</u> °	Long: -115.596687°	Datum: WGS84
• , , ,			
Are climatic / hydrologic conditions on the site typical for t			
Are Vegetation, Soil, or Hydrology	•		resent? Yes <u>√</u> No
Are Vegetation, Soil, or Hydrology		eeded, explain any answe	
SUMMARY OF FINDINGS – Attach site maj			
SOMMAN OF THE HOLD STEET THE		ocations, transects	, important leatures, etc.
Hydrophytic Vegetation Present? Yes		d Area	
Hydric Soil Present? Yes Wetland Hydrology Present? Yes		nd? Yes	No <u>√</u>
Wetland Hydrology Present? Yes	NO ▼		
	dod natustring excavation (DUSCy) No wotland	Lindicators are present
Area mapped by NWI as a seasonally flood The Antecedent Precipitation Tool determ	•	•	•
·			ic or sumpling.
VEGETATION – Use scientific names of pla			
Tree Stratum (Plot size:)	Absolute Dominant Indicator % Cover Species? Status	Dominance Test work	
1		Number of Dominant Sp That Are OBL, FACW, of	or FAC: 0 (A)
2		Total Number of Domina	ant
3		Species Across All Stra	
4		Percent of Dominant Sp	pecies
Sapling/Shrub Stratum (Plot size:)	= Total Cover		or FAC:0 (A/B)
1		Prevalence Index work	ksheet:
2		Total % Cover of:	Multiply by:
3		OBL species	x 1 =
4			x 2 =
5			x 3 =
Herb Stratum (Plot size: 5' radius)	= Total Cover		x 4 =
1		UPL species	
2.		Column Totals.	(A) (B)
3			= B/A =0
4		Hydrophytic Vegetation	
5		Dominance Test is	
6		Prevalence Index is	s ≤3.0° otations¹ (Provide supporting
7			or on a separate sheet)
8	0 = Total Cover	Problematic Hydror	ohytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)	– Total Cover		
1.		¹ Indicators of hydric soil be present, unless distu	l and wetland hydrology must
2			inded of problematic.
	= Total Cover	Hydrophytic Vegetation	
% Bare Ground in Herb Stratum 100 % Cov	ver of Biotic Crust0		s No_ <u>√</u>
Remarks:		•	
Constructed nature of the area likely pre-	cludes vegetative growth.		

Profile Desc	cription: (Describe	to the depth ne	eded to docu	ment the i	ndicator	or confirn	n the absence of ind	icators.)
Depth	Matrix			x Features	3			
(inches)	Color (moist)	<u> </u>	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0 - 17	7.5 YR 4/3	100					SiCl	
				- ——				
	•							_
17		letter DM Deal	l NA-t-i O		0 1 -	-1.01.0	21	DL Dage Lining M Matrix
	oncentration, D=Dep Indicators: (Applic					a Sana G		PL=Pore Lining, M=Matrix. oblematic Hydric Soils ³ :
1		able to all LKK			a.)			•
Histosol	` '	· -	Sandy Red				1 cm Muck (A	
	oipedon (A2)	· -	Stripped M		=.		2 cm Muck (A	
Black Hi	, ,	· -	Loamy Mud	-			Reduced Ver	
	en Sulfide (A4)	- -	Loamy Gle		(F2)		Red Parent N	
	d Layers (A5) (LRR	<u> </u>	Depleted M	. ,	Ε0)		Other (Explai	n in Remarks)
	ick (A9) (LRR D)	- (011)	Redox Darl	,	,			
	d Below Dark Surfac	e (ATT)	Depleted D				31-41-4-4-4	nambo dia camatatian and
l —	ark Surface (A12)	-	Redox Dep Vernal Poo		-8)		•	rophytic vegetation and
	Mucky Mineral (S1) Bleyed Matrix (S4)	-	vemai Poo	IS (F9)				ogy must be present, ed or problematic.
	Layer (if present):						uriless disturbe	ed of problematic.
_	, , ,							
Depth (inc	ches):		-				Hydric Soil Prese	nt? Yes No <u>√</u>
Remarks:								
construct	od aroa							
construct	.eu area							
HYDROLO	GY							
Wetland Hy	drology Indicators:							
Primary India	cators (minimum of c	one required; che	eck all that app	y)			Secondary I	ndicators (2 or more required)
Surface	Water (A1)		Salt Crust	(B11)			Water N	farks (B1) (Riverine)
l —	ater Table (A2)		Biotic Cru	` '				nt Deposits (B2) (Riverine)
Saturation			Aquatic In		s (B13)			posits (B3) (Riverine)
	larks (B1) (Nonrive r	ino)	Hydrogen					e Patterns (B10)
						Livina Bo	-	ason Water Table (C2)
	nt Deposits (B2) (No		· 	•	-	-	· · — ·	, ,
I —	posits (B3) (Nonrive	rine)	Presence					Burrows (C8)
	Soil Cracks (B6)		Recent Iro			d Soils (Ci	•	on Visible on Aerial Imagery (C9)
	on Visible on Aerial	Imagery (B7)	Thin Muck	,	•		· 	Aquitard (D3)
Water-S	tained Leaves (B9)		Other (Ex	plain in Re	marks)		FAC-Ne	eutral Test (D5)
Field Obser	vations:							
Surface Water	er Present? Y	'es No _	✓ Depth (in	ches):				
Water Table	Present?	'es No _	✓ Depth (in	ches):				
Saturation P	resent? Y	'es No _	✓ Depth (in	ches):		Wetl	land Hydrology Pres	ent? Yes No <u>√</u>
(includes cap	oillary fringe)							
Describe Re	corded Data (stream	ı gauge, monitor	ing well, aerial	photos, pro	evious ins	pections),	if available:	
Remarks:								
1								

Project/Site: Morton Bay Geothermal Project	City/Count	y: <u>Imperial C</u>	ounty	Samplin	g Date:	3/12/22
Applicant/Owner: Morton Bay Geothermal LLC			State: C	A Samplin	g Point: _	S-5
Investigator(s): R. Newton, M. King	Section, To	ownship, Rang	je: <u>S27 T11S R1</u>	.3E		
Landform (hillslope, terrace, etc.): depression	Local relie	ef (concave, co	nvex, none): <u>cor</u>	ncave	Slope	e (%): <u>0-2</u>
Subregion (LRR): D - Interior Deserts	Lat: <u>33.187379</u>	-	Long: -115.597	304	Datum	: WGS 84
Soil Map Unit Name: Imperial-Glenbar silty clay loam						
Are climatic / hydrologic conditions on the site typical for t						
Are Vegetation, Soil, or Hydrology			ormal Circumstar			No
Are Vegetation, Soil, or Hydrology			ded, explain any			
SUMMARY OF FINDINGS – Attach site map						tures, etc.
Hydrophytic Vegetation Present? Yes <u>√</u>	No					
Hydric Soil Present? Yes ✓	No.	he Sampled A		s No	1	
Wetland Hydrology Present? Yes	No <u>√</u>	iiii a wellanu	r ies	S NO		
Remarks:						
Area mapped by NWI as palustrine scrub-shrub wetland (PSS) area was previously inundated by the Salton Sea, and hydric s at the time of sampling.						
VEGETATION – Use scientific names of pla						
Tree Stratum (Plot size:)	Absolute Dominan Absolute Dominan Books Mailto:Books Books	2 Status	Dominance Tes			
1			Number of Domine That Are OBL, Factorial Three Properties of the Number of Properties of the Propertie		1	(A)
2.			Total Number of	Dominant		
3			Species Across A		1	(B)
4			Percent of Domir	nant Species		
Sapling/Shrub Stratum (Plot size: 15' radius)	= Total C		That Are OBL, F		100	(A/B)
1. Tamarix sp.	85 Y	FAC	Prevalence Inde	x worksheet:		
2.			Total % Cov	er of:	Multiply	by:
3			OBL species	x	1 =	
4			FACW species			
5			FAC species			
Herb Stratum (Plot size: 5' radius)	= Total C		FACU species			
1			UPL species Column Totals:			55 (B)
2.			Column Totals.	(A)	<u>55</u> (B)
3				Index = B/A =)
4			Hydrophytic Ve		tors:	
5			✓ Dominance			
6			✓ Prevalence I	ndex is ≤3.0° al Adaptations¹	(Dravida a	unnortina
7				emarks or on a		
8			Problematic	Hydrophytic Ve	getation ¹ (Explain)
Woody Vine Stratum (Plot size:)		ovei				
1			¹ Indicators of hyd			
2		- -	be present, unles	ss disturbed or p	порієптаці	j.
	= Total C		Hydrophytic Vegetation			
% Bare Ground in Herb Stratum	er of Biotic Crust		Present?	Yes <u>√</u>	No	
Remarks:						

Depth	. ,							of indicators.)
	Matrix			ox Feature		. 2		
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	<u>Texture</u>	Remarks
0 - 7	2.5 Y 6/2	80					ClLo	
	2.5 Y 4/1	<u>15</u>	7.5 YR 4/6	_ 5	<u>C</u>	<u>M</u>	ClLo	
7 - 18	5 YR 4/4	100		_			Cl	
				_				
				_				
			I=Reduced Matrix, C			d Sand G		ation: PL=Pore Lining, M=Matrix.
-		icable to al	I LRRs, unless othe		ed.)			or Problematic Hydric Soils ³ :
Histosol	` '		Sandy Red	. ,				uck (A9) (LRR C)
	pipedon (A2)		Stripped M		I /E4\			uck (A10) (LRR B)
	istic (A3) en Sulfide (A4)		Loamy Mud Loamy Gle	-				d Vertic (F18) rent Material (TF2)
	d Layers (A5) (LRR	S C)	Loanly Gle		(1 2)			Explain in Remarks)
	uck (A9) (LRR D)	. • ,	Redox Dar		(F6)		0.1101 (2	-xpiair iii riomano)
	d Below Dark Surfa	ice (A11)	Depleted D					
	ark Surface (A12)		Redox Dep				³ Indicators o	f hydrophytic vegetation and
Sandy M	Mucky Mineral (S1)		Vernal Poo	ls (F9)			wetland h	ydrology must be present,
	Gleyed Matrix (S4)						unless dis	turbed or problematic.
	Layer (if present):							
Type:								
Depth (in	ches):						Hydric Soil F	Present? Yes <u>√</u> No
Remarks:								
Soils are l	likaly ralictual	from wh						
Jons are i	incry renetual		ien this area wa	ac inunc	lated h	the Sa	alton Sea	
		IIOIII WI	nen this area wa	as inunc	lated b	y the Sa	alton Sea.	
		TIOIII WI	nen this area wa	as inunc	lated by	y the Sa	alton Sea.	
HYDROLO	GY	nom wi	nen this area wa	as inunc	lated by	y the Sa	alton Sea.	
	GY drology Indicators		ien this area wa	as inunc	lated b	y the Sa	alton Sea.	
Wetland Hy	drology Indicators	S:	ed; check all that app		lated by	y the Sa		dary Indicators (2 or more required)
Wetland Hyd Primary India	drology Indicators	S:		ıly)	lated by	y the Sa	Second	dary Indicators (2 or more required) ater Marks (B1) (Riverine)
Wetland Hyder Primary India	drology Indicators cators (minimum of	S:	ed; check all that app	ly) t (B11)	lated by	y the Sa	Second	ater Marks (B1) (Riverine)
Wetland Hyder Primary India	drology Indicators cators (minimum of Water (A1) ater Table (A2)	S:	ed; check all that app	ly) t (B11) st (B12)		y the Sa	<u>Second</u> Wa Se	<u> </u>
Wetland Hyden Primary India Surface High Water Saturation	drology Indicators cators (minimum of Water (A1) ater Table (A2)	s: one require	ed; check all that app Salt Crust Biotic Cru	ly) t (B11) lst (B12) overtebrate	s (B13)	y the Sa	Second Wa Se Dri	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine)
Wetland Hyd Primary India Surface High Wa Saturatia Water M	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3)	s: one require	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen	ly) t (B11) st (B12) nvertebrate s Sulfide Oo	s (B13) dor (C1)		Second Wa Se Dri Dra	diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine)
Wetland Hyd Primary India Surface High Wa Saturatio Water M Sedimer	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive	s: one require erine) onriverine)	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized	ly) t (B11) st (B12) nvertebrate s Sulfide Oo	s (B13) dor (C1) res along	Living Ro	Second	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10)
Wetland Hyd Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) (Nonrive nt Deposits (B2) (N	s: one require erine) onriverine)	ed; check all that app Salt Crust Biotic Cru Aquatic Ir Hydrogen Oxidized	ly) t (B11) est (B12) nvertebrate i Sulfide O Rhizosphe	s (B13) dor (C1) res along ed Iron (C4	Living Ro	Second Wa Se Dri Dra ots (C3) Dry Cra	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) fft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2)
Wetland Hyd Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) (Nonrive nt Deposits (B2) (Noposits (B3) (Nonrive	s: one require erine) onriverine)	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc	ly) t (B11) lst (B12) nvertebrate Sulfide O Rhizosphe of Reduce	s (B13) dor (C1) res along d Iron (C ² on in Tille	Living Ro	Second	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8)
Wetland Hydelicon Primary India Surface High Water Mater Mat	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) (Nonrive nt Deposits (B2) (Noposits (B3) (Nonrive Soil Cracks (B6)	s: one require erine) onriverine) erine)	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc	lly) t (B11) list (B12) livertebrate l Sulfide Or Rhizosphe of Reduce	s (B13) dor (C1) res along ed Iron (C4 on in Tilled C7)	Living Ro	Second	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9)
Wetland Hydelicon Primary India Surface High Water Mater Mat	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive nt Deposits (B2) (N posits (B3) (Nonriv Soil Cracks (B6) on Visible on Aeria stained Leaves (B9)	s: one require erine) onriverine) erine)	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc	ly) t (B11) st (B12) nvertebrate s Sulfide Or Rhizosphe of Reduce on Reducti k Surface (s (B13) dor (C1) res along ed Iron (C4 on in Tilled C7)	Living Ro	Second	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3)
Wetland Hyderimary India Surface High Water Management Sedimer Drift Dep Surface Inundation Water-S	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) (Nonrive nt Deposits (B2) (N posits (B3) (Nonriv Soil Cracks (B6) on Visible on Aeria stained Leaves (B9) vations:	s: fone require erine) onriverine) erine) I Imagery (E	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc	ly) It (B11) Ist (B12) Invertebrate It Sulfide Or Rhizosphe of Reduce on Reducti It Surface (It plain in Re	s (B13) dor (C1) res along ed Iron (C4 on in Tiller C7) emarks)	Living Ro	Second	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3)
Wetland Hyderimary India Surface High Water Management Sediment Drift Dep Surface Inundation Water-S Field Observiria	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (Nonrive Soil Cracks (B6) on Visible on Aeria Stained Leaves (B9) vations: er Present?	s: fone require erine) onriverine) erine) I Imagery (E	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Ird Thin Mucl	ly) It (B11) Ist (B12) Invertebrate Sulfide Or Rhizosphe of Reduce on Reducti k Surface (plain in Re	s (B13) dor (C1) res along ed Iron (C4 on in Tilled C7) emarks)	Living Rook) d Soils (Co	Second	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3)
Wetland Hydelicon Primary India Surface High Was Saturation Water Modelicon Sedimer Drift Dep Surface Inundation Water-S Field Obsert	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive nt Deposits (B2) (N posits (B3) (Nonriv Soil Cracks (B6) on Visible on Aeria stained Leaves (B9) vations: er Present? Present?	s: erine) onriverine) erine) I Imagery (E) Yes	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Irc Thin Mucl Other (Ex	ly) t (B11) st (B12) evertebrate s Sulfide Or Rhizosphe of Reduce on Reducti k Surface (eplain in Re	s (B13) dor (C1) res along ed Iron (C2 on in Tilled C7) emarks)	Living Ro	Second	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3)
Wetland Hyderimary India Surface High Water Management Sedimer Drift Dep Surface Inundation Water-S Field Obser Surface Water Water Table Saturation P (includes cap	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive nt Deposits (B2) (N posits (B3) (Nonrive Soil Cracks (B6) on Visible on Aeria stained Leaves (B9) vations: her Present? Present? present?	s: erine) onriverine) erine) I Imagery (E Yes Yes	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent In Other (Ex No ✓ Depth (in No ✓ Depth (in	lly) It (B11) Ist (B12) Invertebrate Is Sulfide Or Rhizosphe of Reduce Is Surface (Inches):	s (B13) dor (C1) res along ed Iron (C2 on in Tille (C7) emarks)	Living Rool) d Soils (Co	Second	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)
Wetland Hyderimary India Surface High Water Management Sedimer Drift Dep Surface Inundation Water-S Field Obser Surface Water Water Table Saturation P (includes cap	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive nt Deposits (B2) (N posits (B3) (Nonrive Soil Cracks (B6) on Visible on Aeria stained Leaves (B9) vations: her Present? Present? present?	s: erine) onriverine) erine) I Imagery (E Yes Yes	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Irc Thin Mucl Other (Ex	lly) It (B11) Ist (B12) Invertebrate Is Sulfide Or Rhizosphe of Reduce Is Surface (Inches):	s (B13) dor (C1) res along ed Iron (C2 on in Tille (C7) emarks)	Living Rool) d Soils (Co	Second	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)
Wetland Hyderimary India Surface High Water Management Sediment Drift Dep Surface Inundation Water-S Field Obser Surface Water Table Saturation Polyincludes cap Describe Res	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive nt Deposits (B2) (N posits (B3) (Nonrive Soil Cracks (B6) on Visible on Aeria stained Leaves (B9) vations: her Present? Present? present?	s: erine) onriverine) erine) I Imagery (E Yes Yes	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent In Other (Ex No ✓ Depth (in No ✓ Depth (in	lly) It (B11) Ist (B12) Invertebrate Is Sulfide Or Rhizosphe of Reduce Is Surface (Inches):	s (B13) dor (C1) res along ed Iron (C2 on in Tille (C7) emarks)	Living Rool) d Soils (Co	Second	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)
Wetland Hyderimary India Surface High Water Management Sedimer Drift Dep Surface Inundation Water-S Field Obser Surface Water Water Table Saturation P (includes cap	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive nt Deposits (B2) (N posits (B3) (Nonrive Soil Cracks (B6) on Visible on Aeria stained Leaves (B9) vations: her Present? Present? present?	s: erine) onriverine) erine) I Imagery (E Yes Yes	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent In Other (Ex No ✓ Depth (in No ✓ Depth (in	lly) It (B11) Ist (B12) Invertebrate Is Sulfide Or Rhizosphe of Reduce Is Surface (Inches):	s (B13) dor (C1) res along ed Iron (C2 on in Tille (C7) emarks)	Living Rool) d Soils (Co	Second	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)
Wetland Hyderimary India Surface High Water Mage Sedimer Drift Dep Surface Inundati Water-S Field Obser Surface Water Table Saturation Projection Projection Reserved.	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive nt Deposits (B2) (N posits (B3) (Nonrive Soil Cracks (B6) on Visible on Aeria stained Leaves (B9) vations: her Present? Present? present?	s: erine) onriverine) erine) I Imagery (E Yes Yes	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent In Other (Ex No ✓ Depth (in No ✓ Depth (in	lly) It (B11) Ist (B12) Invertebrate Is Sulfide Or Rhizosphe of Reduce Is Surface (Inches):	s (B13) dor (C1) res along ed Iron (C2 on in Tille (C7) emarks)	Living Rool) d Soils (Co	Second	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)
Wetland Hyderimary India Surface High Water Mage Sedimer Drift Dep Surface Inundati Water-S Field Obser Surface Water Table Saturation Projection Projection Reserved.	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive nt Deposits (B2) (N posits (B3) (Nonrive Soil Cracks (B6) on Visible on Aeria stained Leaves (B9) vations: her Present? Present? present?	s: erine) onriverine) erine) I Imagery (E Yes Yes	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent In Other (Ex No ✓ Depth (in No ✓ Depth (in	lly) It (B11) Ist (B12) Invertebrate Is Sulfide Or Rhizosphe of Reduce Is Surface (Inches):	s (B13) dor (C1) res along ed Iron (C2 on in Tille (C7) emarks)	Living Rool) d Soils (Co	Second	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)
Wetland Hyderimary India Surface High Water Mage Sedimer Drift Dep Surface Inundati Water-S Field Obser Surface Water Table Saturation Projection Projection Reserved.	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive nt Deposits (B2) (N posits (B3) (Nonrive Soil Cracks (B6) on Visible on Aeria stained Leaves (B9) vations: her Present? Present? present?	s: erine) onriverine) erine) I Imagery (E Yes Yes	ed; check all that app Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent In Other (Ex No ✓ Depth (in No ✓ Depth (in	lly) It (B11) Ist (B12) Invertebrate Is Sulfide Or Rhizosphe of Reduce Is Surface (Inches):	s (B13) dor (C1) res along ed Iron (C2 on in Tille (C7) emarks)	Living Rool) d Soils (Co	Second	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) allow Aquitard (D3) C-Neutral Test (D5)

PS-1 Alamo River	OHWM Del	ineation Cover Sheet	Page _/_ of
Project: Martin Bay Geother.	nal Project	Date: 3/12/22	and the same of the same
Project: Martin Bay Geother, Location: Imperial County, (California	Investigator(s): Rentin	u lung
		distubuna areas associated	
geoff of mact project,			
PS-1 Hamo Kver Flows S Salton Sea. The river is a Inputs from irrigation MA	outheast to rossed by se	northwest before termina	eting in the eccives hydrologic
Off-site Information			
Remotely sensed image(s) acquired? [locations of transects, OHWM, and any			
		M	
Hydrologic/hydraulic information acq below.] Description:	uired? 🗌 Yes	No [If yes, attach information	to datasheet(s) and describe
•			
List and describe any other supportin	σ information re	eceived/acquired:	
NHD, NW	g mivi marion i c	1	
,,			
Instructions: Complete one cover sheet and or characteristics of the OHWM along some leng downstream variability in OHWM indicators, coordinates noted on the datasheet.	gth of a given strean	 Complete enough datasheets to adequate 	itely document up- and/or

Datasheet # S	Page 2 of 2							
Transect (cross-section) drawing: (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)								
Keruges 50' between OHune								
Anno Watersurto de ~50' Honor Jonax Anno denax Anno denax								
Souch			.)					
		Did not	mustigate.	depth of the	elveg,			
Break in Slope at Notes/Description	оним: 💢		Moderate (30	· · · · · · · · · · · · · · · · · · ·		None		
	======		e . ·					
Sediment Texture	e: Estimate perco	entages to describ	oe the general sed Gravel	Cobbles	ove and below the Boulders			
	<0.05mm	0.05-2mm	2mm – 1cm	1 – 10cm	>10cm	Developed Soil Horizons (Y/N)		
Above OHWM		100				N		
Below OHWM	001					У		
Vegetation: Estin	nate absolute per	cent cover to des		etation characteri	I	below the OHWM		
Above OHWM	(,,,,	1 22235 (75)	75	25	,			
Below OHWM				100				
Notes/Description:	Armdode	nax						
Other Evidence:	List/describe any	additional field	evidence and/or l	ines of reasoning	used to support	t your delineation		

.

Project/Site: Morton Bay Geothermal	Project		City/County	: Imperial	County		Sampling	Date:	3/12/2	2
Applicant/Owner: Morton Bay Geother	mal LLC				State:	: <u>CA</u>	Sampling I	Point:	S-7	
Investigator(s): R. Newton, M. King			Section, To	wnship, Ra	nge: <u>S23 T1</u>	.1S R13E				
Landform (hillslope, terrace, etc.): stream	nside fringe		Local relief	(concave,	convex, none	e): <u>concave</u>	<u>;</u>	Slope	; (%): <u>2</u>	20
Subregion (LRR): <u>D - Interior Deserts</u>		Lat: <u>33.1</u>	L98821		_ Long: -11!	5.595665		Datum	: WGS84	ŀ
Soil Map Unit Name: Fluvaquents, salir	ne					NWI classific	cation: R2U	IBH		
Are climatic / hydrologic conditions on the	site typical for	this time of year	ır? Yes	No	✓ (If no.	, explain in F	Remarks.)			
Are Vegetation, Soil, or Hy					"Normal Circu			es ✓	No	
Are Vegetation, Soil, or Hy					eded, explai					
SUMMARY OF FINDINGS - Att						•		•	tures, e	tc.
	· /									
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes <u>√</u> Yes <u>√</u>			e Sampled			,			
Wetland Hydrology Present?	Yes <u>√</u>		with	in a Wetlaı	nd?	Yes <u></u>	No_			
Remarks:										
Fringe palustrine emergent we	etland PFM	-1 on the ba	anks of n	erennia	l stream P	S-1 Alam	o River.	The An	tecede	nt
Precipitation Tool determined								,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	teceae	
						1 0				
VEGETATION – Use scientific n	lames of pi		<u> </u>							
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?			e Test world Dominant S				
1						BL, FACW,		1	(A))
2					Total Numl	ber of Domir	nant			
3						cross All Stra		1	(B)	,
4					Percent of	Dominant S	pecies			
Sapling/Shrub Stratum (Plot size:	1		= Total Co	ver		BL, FACW,		100	(A/	B)
1					Prevalenc	e Index wo	rksheet:			
2.					Total 9	% Cover of:		Multiply !	by:	
3.					OBL specie	es	x 1	=		
4					FACW spe	ecies <u>80</u>	x 2	=1	<u> 60</u>	
5					FAC specie	es	x 3	=		
Heat Otrature (Diet size) F' radius	,		= Total Co	ver		cies				
Herb Stratum (Plot size: 5' radius 1. Arundo donax		80	V	EAC\\\	UPL specie		x 5			
2					Column To	otals: 8	<u>(A)</u>	16	<u>50 </u>	3)
3.					Preva	alence Index	c = B/A = _	2.0)	
4.					Hydrophy	tic Vegetati	on Indicato	rs:		
5.					<u>✓</u> Domin	ance Test is	s >50%			
6					I —	lence Index				
7						ological Ada a in Remark				
8						ematic Hydro				
Woody Vine Stratum (Plot size:	1		= Total Co	ver		induo i i yai o	priyac rogo	(1	-xpiaiii)	
1					¹ Indicators	of hydric so	il and wetlar	nd hydro	logy must	:
2.					be present	, unless dist	urbed or pro	blematic	<i>;.</i>	
			= Total Co		Hydrophy					
% Bare Ground in Herb Stratum20) % Cc	over of Riotic Cr	ust O)	Vegetation Present?		es <u>√</u>	No		
Remarks:	<u>, </u>	VCI OI DIOIIC OI	<u> </u>	<u></u>	1 resent:					
Tomano.										

Profile Desc	ription: (Describe	to the dep	oth needed to docur	nent the i	indicator	or confirn	n the absence of	indicators.)
Depth	Matrix			x Feature		. 2	- .	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type'	Loc ²	<u>Texture</u>	Remarks
0 - 8	7.5 YR 4/3	100		·	·		<u>Sa</u>	
8 - 18	2.5 Y 6/1	85	7.5 YR 4/6	<u>15</u>	<u>C</u>	_M	<u>Cl</u>	
					·			
				·				
¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, CS	S=Covere	d or Coate	d Sand G	rains. ² Locatio	on: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applic	able to all	LRRs, unless other	wise not	ed.)		Indicators for	Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Redo	ox (S5)			1 cm Muc	k (A9) (LRR C)
Histic Ep	pipedon (A2)		Stripped Ma	atrix (S6)			2 cm Muc	k (A10) (LRR B)
Black His			Loamy Muc	-				Vertic (F18)
	n Sulfide (A4)		Loamy Gley		(F2)			nt Material (TF2)
	Layers (A5) (LRR (C)	✓ Depleted M	, ,	(FC)		Other (Ex	plain in Remarks)
· · · · · · · · · · · · · · · · · · ·	ick (A9) (LRR D) d Below Dark Surfac	o (A11)	Redox Dark Depleted Dark					
	ark Surface (A12)	C (ATT)	Redox Depi				³ Indicators of h	nydrophytic vegetation and
	lucky Mineral (S1)		Vernal Pool		. 0)			Irology must be present,
-	sleyed Matrix (S4)			o (. o)			-	rbed or problematic.
	_ayer (if present):							•
Type:								
Depth (inc	ches):						Hydric Soil Pre	esent? Yes √ No
Remarks:	, -		<u> </u>					
HYDROLO	GY							
	drology Indicators:							
			d; check all that appl	v)			Secondar	ry Indicators (2 or more required)
	Water (A1)		Salt Crust					er Marks (B1) (Riverine)
	ter Table (A2)		Biotic Crus	` '			·	ment Deposits (B2) (Riverine)
✓ Saturatio	, ,		Aquatic In		s (B13)			Deposits (B3) (Riverine)
	arks (B1) (Nonriver	ine)	Hydrogen					nage Patterns (B10)
	nt Deposits (B2) (No					Livina Roc		Season Water Table (C2)
	oosits (B3) (Nonrive		Presence		_	_		fish Burrows (C8)
	Soil Cracks (B6)		Recent Iro					ration Visible on Aerial Imagery (C9)
	on Visible on Aerial I	magery (B						low Aquitard (D3)
· 	tained Leaves (B9)		Other (Exp		` '			-Neutral Test (D5)
Field Observ							<u> </u>	(-1)
Surface Water		'es	No Depth (in	ches).				
Water Table			No Depth (in			-		
						- Wet	and Hydrology D	recent? Vec / No
Saturation Pr (includes cap		es <u>v</u>	No Depth (in	cnes): <u>o</u>		_ weti	and Hydrology P	resent? Yes <u>√</u> No
		gauge, m	onitoring well, aerial ¡	ohotos, pr	evious ins	pections),	if available:	
Remarks:								

Project/Site: Morton Bay Geothermal Project	City/County: Imperial County Sampling Date: 3/12/22							
Applicant/Owner: Morton Bay Geothermal LLC		State: CA	_ Sampling Point: S-8					
Investigator(s): R. Newton, M. King	igator(s): R. Newton, M. King Section, Township,							
Landform (hillslope, terrace, etc.): bankslope	Local relief (cor	cal relief (concave, convex, none): <u>none</u> Slope (%): <u>50</u>						
Subregion (LRR): D - Interior Deserts	Lat: 33.198839	Long: -115.595652	Datum: WGS85					
		_						
Are climatic / hydrologic conditions on the site typical for								
Are Vegetation, Soil, or Hydrology	•		present? Yes <u>√</u> No					
Are Vegetation, Soil, or Hydrology		(If needed, explain any answ	·					
SUMMARY OF FINDINGS – Attach site ma			,					
Hydrophytic Vegetation Present? Yes	No ✓ Is the Sa							
	No 🗸	umpled Area Wetland? Yes	No <u>✓</u>					
Wetland Hydrology Present? Yes	No <u>√</u>	welland: res	NO <u></u>					
Remarks:								
Paired upland point for PEM-1. The Ante	cedent Precipitation To	ol determined the area	a was drier than normal					
at the time of sampling.								
VEGETATION - Use scientific names of p	lants.							
T OL (Plateins)	Absolute Dominant Indi		rksheet:					
Tree Stratum (Plot size:)	<u>% Cover</u> <u>Species?</u> <u>Sta</u>	Number of Dominant						
1 2		That Are Obl., FACW	/, or FAC:1 (A)					
3.		Total Number of Dom Species Across All St						
4.								
	= Total Cover	Percent of Dominant : That Are OBL, FACW	Species ', or FAC:100 (A/B)					
Sapling/Shrub Stratum (Plot size:)								
1			Multiply by:					
2 3			x 1 =					
4			x 2 = 40					
			x 3 =					
	= Total Cover	FACU species	x 4 =					
Herb Stratum (Plot size: 5' radius)	20 V FA	UPL species						
1. Arundo donax			<u>20</u> (A) <u>40</u> (B)					
2. 3.			ex = B/A =					
4.		Hydrophytic Vegetat						
5.		✓ Dominance Test	is >50%					
6.			a is ≤3.0 ¹					
7			laptations ¹ (Provide supporting ks or on a separate sheet)					
8			rophytic Vegetation ¹ (Explain)					
Woody Vine Stratum (Plot size:)	= Total Cover	1 Toblematio Tryai	opriyilo vegetation (Explain)					
1		¹ Indicators of hydric s	oil and wetland hydrology must					
2.		be present, unless dis	sturbed or problematic.					
	= Total Cover	Hydrophytic						
% Bare Ground in Herb Stratum80	over of Biotic Crust0	Vegetation Present? Y	′es <u>√</u> No					
Remarks:								

Depth	Matrix			x Features				
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
<u>0 - 18</u>	7.5 YR 4/3	100					Sa	
							-	
¹ Type: C=C	oncentration, D=De	pletion, RM=I	Reduced Matrix, CS	=Covered	or Coate	d Sand G	rains. ² L	ocation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appli	cable to all L	RRs, unless other	wise note	d.)			rs for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Redo	x (S5)			1 cm	Muck (A9) (LRR C)
	pipedon (A2)		Stripped Ma					Muck (A10) (LRR B)
	istic (A3)		Loamy Mucl		(F1)			uced Vertic (F18)
	en Sulfide (A4)		Loamy Gley	-				Parent Material (TF2)
Stratifie	d Layers (A5) (LRR	(C)	Depleted Ma	atrix (F3)			Othe	r (Explain in Remarks)
1 cm Mu	uck (A9) (LRR D)		Redox Dark	Surface (F	- 6)			
Deplete	d Below Dark Surfa	ce (A11)	Depleted Da	ark Surface	e (F7)			
Thick Da	ark Surface (A12)		Redox Depr		8)			rs of hydrophytic vegetation and
-	Mucky Mineral (S1)		Vernal Pools	s (F9)				d hydrology must be present,
	Gleyed Matrix (S4)						unless	disturbed or problematic.
Restrictive	Layer (if present):							
Type:								
Depth (in	ches):						Hydric So	oil Present? Yes No <u>√</u>
Remarks:								
HADBOI O	ncv							
HYDROLO								
_	drology Indicators							
Primary Indi	cators (minimum of	one required;	; check all that apply	/)			<u>Sec</u>	ondary Indicators (2 or more required)
	Water (A1)		Salt Crust	. ,				Water Marks (B1) (Riverine)
High Wa	ater Table (A2)		Biotic Crus	t (B12)			_	Sediment Deposits (B2) (Riverine)
Saturati	on (A3)		Aquatic Inv	ertebrates	(B13)		_	Drift Deposits (B3) (Riverine)
Water M	farks (B1) (Nonrive	erine)	Hydrogen	Sulfide Od	or (C1)		_	Drainage Patterns (B10)
Sedime	nt Deposits (B2) (N	onriverine)	Oxidized R	hizospher	es along	Living Roo	ots (C3)	Dry-Season Water Table (C2)
Drift De	posits (B3) (Nonriv	erine)	Presence of	of Reduced	d Iron (C4	1)	_	Crayfish Burrows (C8)
Surface	Soil Cracks (B6)		Recent Iro	n Reductio	n in Tille	d Soils (C6	-	Saturation Visible on Aerial Imagery (C9)
Inundati	on Visible on Aerial	I Imagery (B7)) Thin Muck	Surface (0	27)		_	Shallow Aquitard (D3)
Water-S	Stained Leaves (B9)		Other (Exp	lain in Rer	marks)			FAC-Neutral Test (D5)
Field Obser	vations:							
Surface Wat	ter Present?	Yes N	lo <u>✓</u> Depth (ind	ches):				
Water Table	Present?	Yes N	lo <u>√</u> Depth (ind	ches):				
Saturation P			lo <u>✓</u> Depth (inc			l l	and Hydrolo	gy Present? Yes No <u>√</u>
(includes ca	pillary fringe)							<u> </u>
Describe Re	corded Data (strear	m gauge, mor	nitoring well, aerial p	photos, pre	vious ins	pections),	if available:	
Remarks:								

Project/Site: Morton Bay Geothermal Project City/County: Imperial County Sampling Date: 3/11,								
Applicant/Owner: Morton Bay Geothermal LLC		State:	CA	Sampling Point:	S-9			
Investigator(s): R. Newton, M. King	hip, Range	e: <u>S22 T11S F</u>	R13E					
Landform (hillslope, terrace, etc.): lacustrine fringe	L	ocal relief (cor	ncave, cor	nvex, none): <u>m</u>	inor cor	ncave SI	ope (%): <u>0-1</u>	
Subregion (LRR): D - Interior Deserts	Lat: 33.19	99757	L	.ong: -115.59	7395	Dat	um: WGS84	
Soil Map Unit Name: Fluvaquents, saline				-				
Are climatic / hydrologic conditions on the site typical for								
Are Vegetation, Soil, or Hydrology	_						✓ No	
Are Vegetation, Soil, or Hydrology						s in Remarks.)		
SUMMARY OF FINDINGS – Attach site ma			,			,	eatures, etc.	
,	<u> </u>			·		<u> </u>	<u> </u>	
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes ✓ Yes ✓			ampled A		,			
Wetland Hydrology Present? Yes ✓		within a	Wetland?	? Yo	es <u>√</u>	No	_	
Remarks:								
Depressional/fringe palustrine scrub-shrub wetland								
after the Salton Sea receded. The Antecedent Precip	oitation Tool de	termined the	area was	drier than no	ormal at t	the time of san	npling.	
VEGETATION – Use scientific names of pla	ants							
VEGETATION OSC SCIENTING NAMES OF PR		Dominant Indi	icator [Dominance Te	st works	heet:		
Tree Stratum (Plot size:)		Species? Sta	otuo	Number of Don				
1				That Are OBL,			3 (A)	
2				Total Number o			_	
3			^s	Species Across	All Strata	a:	3 (B)	
4		= Total Cover		Percent of Dom			00 (4.75)	
Sapling/Shrub Stratum (Plot size: 5 x 20)		- Total Cover	1	That Are OBL,	FACW, o	r FAC:1	.00 (A/B)	
1. Tamarix sp.	35	<u>Y</u> <u>F</u>	AC F	Prevalence Inc				
2						Multip		
3						x 1 =		
4						x 2 =		
5		Total Cover	_			x 3 = x 4 =		
Herb Stratum (Plot size: 5 x 5		- Total Cover				x 5 =		
1. Arundo donax	15	Y FA				(A)	160 (B)	
2. <u>Schoenoplectus maritimus</u>	25	Y C	OBL_					
3			_			= B/A =	2.1	
4				Hydrophytic V				
5			—— I [—]	✓ Dominance✓ Prevalence				
6			-			=5.0 tations¹ (Provid	e supporting	
7 8				data in l	Remarks	or on a separat	e sheet)	
<u> </u>		Total Cover		Problemati	c Hydrop	hytic Vegetatior	າ ¹ (Explain)	
Woody Vine Stratum (Plot size:)								
1						and wetland hydbed or problem		
2				•				
		= Total Cover		-lydrophytic /egetation				
% Bare Ground in Herb Stratum60	ver of Biotic Cru	ıst <u>0</u>	F	Present?	Yes	No		
Remarks:								

US Army Corps of Engineers

Depth	Matrix	0/		ox Feature	es 1	. 2		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	_
0 - 2	2.5 Y 6/2	100		_			SiCl	_
2 - 4	10 Y 5/Gley 1	90	7.5 YR 5/6	10		M	<u>Cl</u>	_
4 - 5	10 YR 5/2	100			_		<u>Cl</u>	_
<u>5 - 18</u>	10 Y 6/Gley 1	90	5 YR 4/6	_10	<u>C</u>	<u>M</u>	<u>Cl</u>	_
				_				
		_					-	
			-					
¹ Type: C=C	oncentration D=De	oletion RN	/=Reduced Matrix, C	S=Covere	ed or Coat	ted Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.	_
			II LRRs, unless othe			ica cana c	Indicators for Problematic Hydric Soils ³ :	
Histosol			Sandy Red				1 cm Muck (A9) (LRR C)	
Histic Ep	pipedon (A2)		Stripped M				2 cm Muck (A10) (LRR B)	
	istic (A3)		Loamy Mu	-			Reduced Vertic (F18)	
	en Sulfide (A4)	•	Loamy Gle	-			Red Parent Material (TF2)	
	d Layers (A5) (LRR uck (A9) (LRR D)	C)	✓ Depleted N — Redox Dar				Other (Explain in Remarks)	
	d Below Dark Surfac	ce (A11)	Nedox Bai					
	ark Surface (A12)	, , ,	Redox Dep				³ Indicators of hydrophytic vegetation and	
Sandy M	Aucky Mineral (S1)		Vernal Poo				wetland hydrology must be present,	
	Bleyed Matrix (S4)						unless disturbed or problematic.	
	Layer (if present):							
Type:								
Depth (inc	ches):						Hydric Soil Present? Yes <u>√</u> No	_
HYDROLO	GY							
Wetland Hy	drology Indicators	:						
Primary India	cators (minimum of	one requir	ed; check all that app	oly)			Secondary Indicators (2 or more required)	_
_	Water (A1)		✓ Salt Crus	t (B11)			Water Marks (B1) (Riverine)	
_	ater Table (A2)		Biotic Cru				Sediment Deposits (B2) (Riverine)	
✓ Saturation			Aquatic li				Drift Deposits (B3) (Riverine)	
	larks (B1) (Nonrive	,	Hydroger			a Lista a Da	Drainage Patterns (B10)	
	nt Deposits (B2) (No		· —			-	oots (C3) Dry-Season Water Table (C2)	
	posits (B3) (Nonrive Soil Cracks (B6)	erine)	Presence			ed Soils (C	Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)	۵۱
	on Visible on Aerial	Imagery (eu oons (o	Shallow Aguitard (D3)	٥)
	tained Leaves (B9)	• • •	· —	plain in R	, ,		FAC-Neutral Test (D5)	
Field Obser	. ,			-				
Surface Wat		res	No <u>√</u> Depth (ii	nches):				
Water Table			No Depth (ii					
Saturation P		Yes <u>√</u>	No Depth (ii	nches): <u>8</u>		Wet	tland Hydrology Present? Yes <u>√</u> No	_
(includes cap Describe Re		n gauge, n	nonitoring well, aerial	photos, p	revious in	l nspections),), if available:	
	,	_ 3 .	3 ,	. , , ,		. ,,		
Remarks:								

Project/Site: Morton Bay Geothermal Project	City/County: Imperia	County	Sampling Date: 3/11/22				
Applicant/Owner: Morton Bay Geothermal LLC		State: CA	Sampling Point: S-10				
Investigator(s): R. Newton, M. King Section, Township, Range: S22 T11S R13E							
Landform (hillslope, terrace, etc.): exposed lake bed	Local relief (concave, convex, none): <u>none</u> Slope (%):						
Subregion (LRR): <u>D</u> - Interior Deserts	Lat: 33.199788	Long: -115.597471	Datum: WGS 84				
		=					
Are climatic / hydrologic conditions on the site typical for							
Are Vegetation, Soil, or Hydrology	•		oresent? Yes <u>√</u> No				
Are Vegetation, Soil, or Hydrology		eeded, explain any answe					
SUMMARY OF FINDINGS – Attach site ma							
SUMMART OF FINDINGS - Attach site ma		Callons, transects	, important leatures, etc.				
Hydrophytic Vegetation Present? Yes		d Area					
Hydric Soil Present? Yes		nd? Yes	No <u>√</u>				
Wetland Hydrology Present? Yes Remarks:	No						
Seasonally flooded palustrine salt flat PUBC-1 occ	cunving transitional area between	n watlands fringing Ms	ortan Day and man made				
areas of higher topography. The Antecedent Pred							
VEGETATION – Use scientific names of plants		T =					
Tree Stratum (Plot size:)	Absolute Dominant Indicator % Cover Species? Status	Dominance Test work					
1		Number of Dominant S That Are OBL, FACW,	or FAC: 0 (A)				
2.		Total Number of Domin					
3		Species Across All Stra					
4		Percent of Dominant S	necies				
Sapling/Shrub Stratum (Plot size:)	= Total Cover		or FAC:0 (A/B)				
1		Prevalence Index wor	ksheet:				
2			Multiply by:				
3			x 1 =				
4.		FACW species	x 2 =				
5		FAC species	x 3 =				
U. J. O. J. (Distained El wadius)	= Total Cover	1	x 4 =				
Herb Stratum (Plot size: 5' radius)		UPL species					
1		Column Totals:	(A) (B)				
3		Prevalence Index	c = B/A =0				
4		Hydrophytic Vegetation	on Indicators:				
5		Dominance Test is	>50%				
6		Prevalence Index i					
7			ptations ¹ (Provide supporting				
8			s or on a separate sheet) phytic Vegetation ¹ (Explain)				
Woody Vine Stratum (Plot size:)	= Total Cover	i Toblematic Hydro	priyite vegetation (Explain)				
1		¹ Indicators of hydric so	il and wetland hydrology must				
2.		be present, unless distr					
	= Total Cover	Hydrophytic					
% Bare Ground in Herb Stratum 100 % Co	over of Biotic Crust0	Vegetation Present? Ye	es No_ <u>√</u> _				
Remarks:	ver of biotic ordst	riesent: ie	<u> </u>				
No vegetation present.							

Depth	<u>Matrix</u>	0/		ox Feature		. 2				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks			
0 - 2	2.5 Y 5/2	_ 100					SiCl			
2 - 10	<u>5 Y 5/1</u>	80	-			·	CILo			
	7.5 YR 4/6	10					<u>Cl</u>			
	2.5 YR 2.5/1	10				-	<u>Cl</u>			
<u>10 - 18</u>	2.5 Y 6/1	<u>85</u>	7.5 YR 4/6	15	_ <u>C</u>	M	<u>Cl</u>			
¹ Type: C=C	oncentration D=De	nletion RN	/=Reduced Matrix, C	S=Covere	ed or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.			
			II LRRs, unless othe				Indicators for Problematic Hydric Soils ³ :			
Histosol	(A1)		Sandy Red	lox (S5)			1 cm Muck (A9) (LRR C)			
Histic Ep	pipedon (A2)		Stripped M	atrix (S6)			2 cm Muck (A10) (LRR B)			
	istic (A3)		Loamy Mu	-			Reduced Vertic (F18)			
	en Sulfide (A4)		Loamy Gle	-			Red Parent Material (TF2)			
	d Layers (A5) (LRR	(C)	✓ Depleted N				Other (Explain in Remarks)			
	uck (A9) (LRR D) d Below Dark Surfa	co (A11)	Redox Dar Depleted D							
	d Below Dark Suna ark Surface (A12)	Ce (ATT)	Redox Dep		. ,		³ Indicators of hydrophytic vegetation and			
	Mucky Mineral (S1)		Vernal Poo		(10)		wetland hydrology must be present,			
-	Gleyed Matrix (S4)			(1 -)			unless disturbed or problematic.			
Restrictive	Layer (if present):									
Type:										
Depth (in	ches):						Hydric Soil Present? Yes No			
Remarks:										
HYDROLO	iGY									
	drology Indicators):								
_			ed; check all that app	lv)			Secondary Indicators (2 or more required)			
	Water (A1)		✓ Salt Crus				Water Marks (B1) (Riverine)			
	ater Table (A2)		Biotic Cru				Sediment Deposits (B2) (Riverine)			
✓ Saturation			Aquatic Ir		es (B13)		Drift Deposits (B3) (Riverine)			
	Marks (B1) (Nonrive	erine)	Hydrogen				Drainage Patterns (B10)			
	nt Deposits (B2) (N	•				Living Ro	ots (C3) Dry-Season Water Table (C2)			
	posits (B3) (Nonriv		· —		ed Iron (C	-	Crayfish Burrows (C8)			
Surface	Soil Cracks (B6)	,			tion in Tille		_ , , ,			
	ion Visible on Aerial	Imagery (B7) Thin Muc	k Surface	(C7)	•	Shallow Aquitard (D3)			
Water-S										
	Stained Leaves (B9)		Other (Ex	plain in R	emarks)		FAC-Neutral Test (D5)			
Field Obser	Stained Leaves (B9)		Other (Ex	plain in R	emarks)		FAC-Neutral Test (D5)			
Field Obser Surface Wat	Stained Leaves (B9) vations:		Other (Ex	-	<u> </u>		FAC-Neutral Test (D5)			
	Stained Leaves (B9) rvations: ter Present?	Yes		nches):	· · · · · · · · · · · · · · · · · · ·	_	FAC-Neutral Test (D5)			
Surface Wat Water Table Saturation P	Stained Leaves (B9) rvations: ter Present? Present?	Yes Yes √	No <u>√</u> Depth (in	nches):			FAC-Neutral Test (D5)			
Surface Wat Water Table Saturation P (includes cap	stained Leaves (B9) rvations: ter Present? Present? pillary fringe)	Yes Yes✓	No ✓ Depth (ir No Depth (ir No Depth (ir	nches): nches): <u>8</u> nches): <u>8</u>		Wet	land Hydrology Present? Yes ✓ _ No			
Surface Wat Water Table Saturation P (includes cap	stained Leaves (B9) rvations: ter Present? Present? pillary fringe)	Yes Yes✓	No ✓ Depth (ir	nches): nches): <u>8</u> nches): <u>8</u>		Wet	land Hydrology Present? Yes ✓ _ No			
Surface Wat Water Table Saturation P (includes cap Describe Re	stained Leaves (B9) rvations: ter Present? Present? pillary fringe)	Yes Yes✓	No ✓ Depth (ir No Depth (ir No Depth (ir	nches): nches): <u>8</u> nches): <u>8</u>		Wet	land Hydrology Present? Yes ✓ _ No			
Surface Wat Water Table Saturation P (includes cap	stained Leaves (B9) rvations: ter Present? Present? pillary fringe)	Yes Yes✓	No ✓ Depth (ir No Depth (ir No Depth (ir	nches): nches): <u>8</u> nches): <u>8</u>		Wet	land Hydrology Present? Yes ✓ _ No			
Surface Wat Water Table Saturation P (includes cap Describe Re	stained Leaves (B9) rvations: ter Present? Present? pillary fringe)	Yes Yes✓	No ✓ Depth (ir No Depth (ir No Depth (ir	nches): nches): <u>8</u> nches): <u>8</u>		Wet	land Hydrology Present? Yes ✓ _ No			
Surface Wat Water Table Saturation P (includes cap Describe Re	stained Leaves (B9) rvations: ter Present? Present? pillary fringe)	Yes Yes✓	No ✓ Depth (ir No Depth (ir No Depth (ir	nches): nches): <u>8</u> nches): <u>8</u>		Wet	land Hydrology Present? Yes ✓ _ No			
Surface Wat Water Table Saturation P (includes cap Describe Re	stained Leaves (B9) rvations: ter Present? Present? pillary fringe)	Yes Yes✓	No ✓ Depth (ir No Depth (ir No Depth (ir	nches): nches): <u>8</u> nches): <u>8</u>		Wet	land Hydrology Present? Yes ✓ _ No			

Project/Site: Morton Bay Geothermal Project	City/County: Imper	ial County	Sampling Date: 3/11/22
Applicant/Owner: Morton Bay Geothermal LLC		State: CA	Sampling Point: S-11
Investigator(s): R. Newton, M. King	Section, Township, F	Range: <u>S22 T11S R13E</u>	
Landform (hillslope, terrace, etc.): road slope	Local relief (concave	e, convex, none): none	Slope (%): <u>15</u>
Subregion (LRR): D - Interior Deserts	Lat: 33.19965	Long: <u>-115.597441</u>	Datum: WGS 84
Soil Map Unit Name: Fluvaquents, saline		NWI classifi	ication: L2USC
Are climatic / hydrologic conditions on the site typical f			
Are Vegetation, Soil, or Hydrology	•		present? Yes ✓ No
Are Vegetation, Soil, or Hydrology		needed, explain any answ	•
SUMMARY OF FINDINGS - Attach site r			,
Hydrophytic Vegetation Present? Yes	No ✓ Is the Sample	- 1 4	
	No Is the Sample within a Wetl		No <u>√</u> _
	No <u>√</u> widiiii a wed	aliu: 165	NO <u></u> _
Remarks:			
Paired upland point for PSS-1 and PUBC	·		-
Antecedent Precipitation Tool determin	ned the area was drier than i	normal at the time of	or sampling.
VEGETATION – Use scientific names of	plants.		
Tree Stratum (Plot size:)	Absolute Dominant Indicato % Cover Species? Status		
1		- Number of Dominant s	Species , or FAC:0 (A)
2.			
3.		 Total Number of Domi Species Across All Str 	
4			
	= Total Cover	 Percent of Dominant S That Are OBL, FACW, 	opecies , or FAC:
Sapling/Shrub Stratum (Plot size:)		Prevalence Index wo	rksheet:
1 2		Total % Cover of:	
3.			x 1 =
4.		-	x 2 =
5.		FAC species	x 3 =
et t	= Total Cover	FACU species	x 4 =
Herb Stratum (Plot size: 5' radius)		UPL species	
1		Column Totals:	(A) (B)
2		 Prevalence Index 	x = B/A =0
4.		Hydrophytic Vegetat	
5.		Dominance Test is	s >50%
6.		Prevalence Index	
7		Morphological Ada	aptations ¹ (Provide supporting
8			ks or on a separate sheet) ophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)	= Total Cover	r roblematic rryun	oprific vegetation (Explain)
1		¹ Indicators of hydric so	oil and wetland hydrology must
2.		be present, unless dis	
	= Total Cover	Hydrophytic	
% Bare Ground in Herb Stratum 100 %	Cover of Biotic Crust0	Vegetation Present? You	es No_ <u>√</u> _
Remarks:		1	

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the i	indicator	or confirn	n the absence	of indicators.)
Depth	Matrix	0/		ox Feature	1	12	Taretresa	Demonto
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc²	<u>Texture</u>	Remarks
<u>0 - 18</u>	5 Y 6/2	<u>85</u>	7.5 YR 6/8	15	_ <u>C</u>	_ <u>M</u>	<u>SiSa</u>	
				_				
					. ———			
	-							
17		letier DM	Dadwa d Matrix O	0 0			21	eties Di Deseliaire M Metric
	oncentration, D=Dep Indicators: (Applic					ed Sand G		ation: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
=		able to all			eu.)			
Histosol	(AT) pipedon (A2)		✓ Sandy Red					luck (A9) (LRR C)
Black Hi			Stripped M Loamy Mu		J (E1)			luck (A10) (LRR B) ed Vertic (F18)
	n Sulfide (A4)		Loamy Gle					rent Material (TF2)
	l Layers (A5) (LRR (C)	Depleted N	-	(1 2)			Explain in Remarks)
	ck (A9) (LRR D)	-,	Redox Dar	, ,	(F6)			
	d Below Dark Surfac	e (A11)	Depleted D					
	ark Surface (A12)	, ,	Redox Dep				³ Indicators of	of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Vernal Poo	ls (F9)			wetland h	nydrology must be present,
	leyed Matrix (S4)						unless di	sturbed or problematic.
Restrictive L	ayer (if present):							
Type:								
Depth (inc	ches):						Hydric Soil I	Present? Yes <u>√</u> No
Remarks:							1	
Redoximo	orphic features	likely re	elictual from w	hen this	area v	vas inur	ndated by th	ne Salton Sea.
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary Indic	ators (minimum of c	ne require	d; check all that app	ly)			Secon	dary Indicators (2 or more required)
Surface	Water (A1)		Salt Crus	t (B11)			W	ater Marks (B1) (Riverine)
High Wa	ter Table (A2)		Biotic Cru					ediment Deposits (B2) (Riverine)
Saturation	, ,		Aquatic Ir		s (B13)			rift Deposits (B3) (Riverine)
	arks (B1) (Nonriver	ine)	Hydrogen	Sulfide O	dor (C1)			rainage Patterns (B10)
	nt Deposits (B2) (No					Living Roo		ry-Season Water Table (C2)
	osits (B3) (Nonrive			of Reduce	-	_		rayfish Burrows (C8)
	Soil Cracks (B6)					ed Soils (C6		aturation Visible on Aerial Imagery (C9)
	on Visible on Aerial I	magery (B		k Surface (•	· —	nallow Aquitard (D3)
· 	tained Leaves (B9)	3 , (plain in Re	emarks)			AC-Neutral Test (D5)
Field Observ			<u> </u>	•	,			· ,
Surface Water	er Present? Y	'es	No <u>✓</u> Depth (ir	nches):				
Water Table			No <u>✓</u> Depth (ir					
Saturation Pr			No <u>√</u> Depth (ir			l l	and Hydrology	Present? Yes No ✓
(includes cap		es	ivo <u>v</u> Deptii (ii	icries)		•••••	and Hydrology	rresent: res No
	corded Data (stream	gauge, mo	onitoring well, aerial	photos, pr	evious in	spections),	if available:	
Remarks:								

5-12				
	Ditch-1	OHWM De	elineation Cover Sheet	Page _ l _ of _ 2_
Project:	Martin Ban Go	Hermal Project	Date: 3/12/22	o de la companya de de de la companya de de la companya della companya de la companya de la companya de la companya de la companya della comp
Location	n: Imperial County	California	Investigator(s): R Newto	n, M. Ling
	,			•
Troject	Styly area Proposod geotherm	includes all po- ul project.	tentral disturbance areas	associated with
Describ	e the river or stream's c	ondition (disturbance	s, in-stream structures, etc.):	
		0	extanless thouse	, han adjacent
Sal-	+ flat towards.	Morten Bay. (1	its ditch may have	been constructed to
Off-site	Information			
			[If yes, attach image(s) to data f interest on the image(s); describ	
_	ogic/hydraulic informat Description:	ion acquired? 🗌 Yes	No [If yes, attach informa	ation to datasheet(s) and describe
	_			
List and	d describe any other sup	porting information	received/acquired:	
	NHD, NWI			
Instruction	ons: Complete one cover she	eet and one or more datash	eets for each project site. Each datash	eet should capture the dominant
downstre	eam variability in OHWM inc	ome length of a given strea dicators, stream conditions	am. Complete enough datasheets to ac , etc. Transect locations can be marke	dequately document up- and/or ed on a recent aerial image or their GPS
coordina	ites noted on the datasheet.			

Datasheet # 5-1	Z Pitch-1	OHW	M Delineation 1	Datasheet	-	Page 2 of 2			
some distance; lab	section) drawing pel the OHWM ar	: (choose a located other features	ion that is represe of interest along t	entative of the do he transect; inclu	minant stream c ide an estimate (haracteristics over of transect length)			
REM N 1	7 appr	ox 5'feet		between 0 H					
Solfent Ren College College Ren Tent Other 6'deep									
Break in Slope at OHWM: Sharp (> 60°) Moderate (30–60°) Gentle (< 30°) None Notes/Description:									
Soding and Tout									
Sediment Texture	Clay/Silt <0.05mm	Sand 0.05 – 2mm	Gravel 2mm – 1cm	Cobbles 1 – 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)			
Above OHWM	70	30				N			
Below OHWM	100			<u> </u>		N			
Vegetation: Estin	nate absolute per Tree (%)	cent cover to desc	cribe general vege Herb (%)	etation characteri		below the OHWM			
Above OHWM				100					
Below OHWM				100					
Notes/Description:		additional field	evidence and/or li	ines of reasoning	g used to support	your delineation			

Project/Site: Morton Bay Geothermal Project	City/County	Imperial Co	unty	_ Sampling Date: _	3/11/22
Applicant/Owner: Morton Bay Geothermal LLC			State: CA	Sampling Point: _	S-13
Investigator(s): R. Newton, M. King	wnship, Range	S22 T11S R13E			
Landform (hillslope, terrace, etc.): <u>lake fringe</u>	Local relief	concave Slop	oe (%): <u>0-1</u>		
Subregion (LRR): D - Interior Deserts	Lat: 33.200924	Lo	ong: -115.597186	Datur	n: WGS 84
Soil Map Unit Name: Fluvaquents, saline		<u> </u>	NWI classi	fication: L2USC	
Are climatic / hydrologic conditions on the site typical					
Are Vegetation, Soil, or Hydrology	-			" present? Yes <u>√</u>	′ No
Are Vegetation, Soil, or Hydrology			ed, explain any ansv		
SUMMARY OF FINDINGS – Attach site		•		,	atures, etc.
Hydrophytic Vegetation Present? Yes✓	No ls th		·	· ·	·
	No.	e Sampled Ar		/	
	No with	in a Wetland?	Yes	✓ No	ı
Remarks:	l				
Fringe palustrine emergent wetland PEM-2 along after the Salton Sea receded. The Antecedent Pres					
after the Sation Sea receded. The Afficedent Fred	cipitation roof determined ti	ie aiea was ui	er tilali libililarat i	ine time of sampling	; -
VEGETATION – Use scientific names of	plants.				
T. O. (District)	Absolute Dominant		ominance Test wo	rksheet:	
Tree Stratum (Plot size:)	% Cover Species?	l IN	umber of Dominant hat Are OBL, FACW		(4)
1 2			nat Ale OBL, FACN	7, 01 FAC	(A)
3.		1	otal Number of Dom pecies Across All St		(B)
4.					(D)
	= Total Co		ercent of Dominant hat Are OBL, FACW		0 (A/B)
Sapling/Shrub Stratum (Plot size:					
1			revalence Index we	crksneet: : Multiply	, by:
2				x 1 =	-
3 4				x 2 =	
5				x 3 =	
	= Total Co			x 4 =	
Herb Stratum (Plot size: 5' radius)		U		x 5 =	
1. Schoenoplectus maritimus		OBL C	olumn Totals:	70 (A)	70 (B)
2. Typha domingensis			Prevalence Inde	ex = B/A =1.	0
3			ydrophytic Vegeta		
4. 5.			Dominance Test		
6				c is ≤3.0 ¹	
7.				daptations ¹ (Provide	
8.				rks or on a separate	•
	= Total Co	ver -	_ Problematic Hydi	rophytic Vegetation ¹	(Explain)
Woody Vine Stratum (Plot size:)		11	ndicators of hydric s	oil and wetland hydr	ology must
1		h		sturbed or problemat	
2	= Total Co		ydrophytic		
N. David Construct in Harth Objections 20	<u> </u>	V	egetation	(a.a. / Na	
	Cover of Biotic Crust	<u> </u>	resent?	'es <u>√</u> No	
Remarks:					

Profile Description: (Describe to the depth i	needed to docum	nent the i	ndicator	or confirm	n the absence of	indicators.)
Depth Matrix		x Features	1	. 2		
(inches) Color (moist) %	Color (moist)	%	Type'	Loc ²	<u>Texture</u>	Remarks
		·				
			-			
1T. man O. Composition D. Domistica DM Do	durand Matrice OC		0 1 -	-1.01.0-	21 4:	San Di Dana Lining M Matrix
¹ Type: C=Concentration, D=Depletion, RM=Re Hydric Soil Indicators: (Applicable to all LR				d Sand Gr		on: PL=Pore Lining, M=Matrix. r Problematic Hydric Soils ³ :
			a.)			•
Histosol (A1)	Sandy Redomerated Stripped Ma	. ,				ck (A9) (LRR C)
Histic Epipedon (A2)		, ,	I (E1)			ck (A10) (LRR B)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Muc Loamy Gley	-				Vertic (F18) ent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted M		(1 2)			plain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark	` '	F6)		Outlet (E)	tpiani in remains)
Depleted Below Dark Surface (A11)	Depleted Da	•	,			
Thick Dark Surface (A12)	Redox Depi				³ Indicators of	hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Vernal Pool		,			drology must be present,
Sandy Gleyed Matrix (S4)					-	urbed or problematic.
Restrictive Layer (if present):						
Type:	_					
Depth (inches):	<u></u>				Hydric Soil Pr	resent? Yes <u>√</u> No
Remarks:						
Soils not investigated: hydric soils	assumed in p	resenc	e of do	minant	OBL vegetati	ion and standing water.
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of one required; c	heck all that apply	y)			Seconda	ary Indicators (2 or more required)
✓ Surface Water (A1)	Salt Crust	(B11)			Wat	er Marks (B1) (Riverine)
High Water Table (A2)	Biotic Crus	st (B12)			Sed	iment Deposits (B2) (Riverine)
Saturation (A3)	Aquatic Inv	ertebrate:	s (B13)		Drift	Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine)	Hydrogen	Sulfide Oc	dor (C1)		Drai	nage Patterns (B10)
Sediment Deposits (B2) (Nonriverine)	Oxidized F	Rhizospher	res along l	Living Roo	ots (C3) Dry-	Season Water Table (C2)
Drift Deposits (B3) (Nonriverine)	Presence	of Reduce	d Iron (C4	·)	Cray	fish Burrows (C8)
Surface Soil Cracks (B6)	Recent Iro	n Reductio	on in Tilled	d Soils (C6	S) <u>✓</u> Satu	ration Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7)	Thin Muck	Surface (C7)		Sha	llow Aquitard (D3)
Water-Stained Leaves (B9)	Other (Exp	lain in Re	marks)		<u>√</u> FAC	C-Neutral Test (D5)
Field Observations:						
Surface Water Present? Yes <u>✓</u> No	Depth (inc	ches): 2		_		
Water Table Present? Yes No	Depth (inc	ches):				
	Depth (inc				and Hydrology P	Present? Yes <u>√</u> No
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitor	oring well, aerial p	photos, pre	evious ins	pections),	if available:	
Remarks:						
High water table and saturation ar	e assumed					
oacc. table and saturation at	c assamca.					

Project/Site: Morton Bay Geothermal Project	City/County: Imper	rial County	Sampling Date: 3/12/22			
Applicant/Owner: Morton Bay Geothermal, LLC		State: CA	Sampling Point: S-14			
Investigator(s): R. Newton, M. King	Section, Township,	Range: S22 T11S R13E				
Landform (hillslope, terrace, etc.): lake	Local relief (concav	Local relief (concave, convex, none): concave Slope				
Subregion (LRR): D - Interior Deserts	Lat: 33.201662	Long: -115.597179	Datum: WGS 84			
Soil Map Unit Name: Fluvaquents, saline		NWI classifi	cation: L1UBH			
Are climatic / hydrologic conditions on the site typical for						
Are Vegetation, Soil, or Hydrology	·		present? Yes <u>√</u> No			
Are Vegetation, Soil, or Hydrology	 •	f needed, explain any answe	· ——			
SUMMARY OF FINDINGS - Attach site m				c.		
Hydrophytic Vegetation Present? Yes✓	No ls the Samo					
	No.		No. /			
	No within a We	tiand? Yes	No <u>√</u>			
Remarks:						
NWI-mapped L1UBH-1, Morton Bay. The	e Antecedent Precipitation	Tool determined the	e area was drier than			
normal at the time of sampling.						
VEGETATION – Use scientific names of	plants.					
	Absolute Dominant Indicate		ksheet:			
Tree Stratum (Plot size:)	<u>% Cover</u> <u>Species?</u> <u>Status</u>	- Number of Dominant 3				
1		That Are OBL, FACW,	, or FAC:1 (A)			
2 3		Total Number of DominSpecies Across All Strange				
4.			、,			
	= Total Cover	Percent of Dominant S That Are OBL FACW	Species , or FAC: <u>100</u> (A/B)	3)		
Sapling/Shrub Stratum (Plot size:)				_		
1		Prevalence Index wo				
2		 -	<u>Multiply by:</u> x 1 = <u>25</u>			
3 4			x 2 =			
			x 3 =			
	= Total Cover		x 4 =			
Herb Stratum (Plot size: 5' radius)		UPL species	x 5 =			
1. Typha domingensis		Column Totals: 2	<u>25</u> (A) <u>25</u> (B)	1		
2		— Prevalence Inde	x = B/A =			
3		Hydrophytic Vegetati	·			
4 5						
6.		/ Prevalence Index				
7.			aptations ¹ (Provide supporting			
8			ks or on a separate sheet)			
	= Total Cover	Problematic Hydro	ophytic Vegetation ¹ (Explain)			
Woody Vine Stratum (Plot size:)		¹ Indicators of hydric sc	oil and wetland hydrology must			
1		be present, unless dist				
2	= Total Cover	Hydrophytic	-	_		
0/ Page Crayed in Harb Charles 75		Vegetation	aa / Na			
% Bare Ground in Herb Stratum	Cover of Biotic Crust	Present? Ye	es No			
Remarks:						

Profile Desc	ription: (Descril	be to the dept	h needed to docui	ment the i	ndicator	or confirm	the absence of	indicators.)
Depth	Matrix			x Feature				
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	_Loc ²	<u>Texture</u>	Remarks
				- '				
	-			-				
								_
				-				
	-							
			Reduced Matrix, C			ed Sand Gr		ion: PL=Pore Lining, M=Matrix.
-		licable to all L	RRs, unless othe		ea.)			or Problematic Hydric Soils ³ :
Histosol			Sandy Red					ck (A9) (LRR C)
	ipedon (A2)		Stripped Ma		. (54)			ck (A10) (LRR B)
Black His	. ,		Loamy Muc	-				Vertic (F18)
	n Sulfide (A4)	D C\	Loamy Gle		(FZ)			ent Material (TF2)
	Layers (A5) (LR ck (A9) (LRR D)	KC)	Depleted M Redox Darl	. ,	(E6)		Other (E	xplain in Remarks)
	Below Dark Surf	ace (A11)	Depleted D		,			
	rk Surface (A12)	acc (ATT)	Redox Dep				³ Indicators of	hydrophytic vegetation and
	ucky Mineral (S1)	Vernal Poo	,	0)			drology must be present,
	leyed Matrix (S4)			()			•	urbed or problematic.
	ayer (if present)							
Type:								
Depth (inc							Hydric Soil Pi	resent? Yes No
Remarks:							Tryuno con T	100
Soils not i	nvestigated							
HYDROLOG	GY							
Wetland Hyd	Irology Indicator	rs:						
_			; check all that appl	v)			Seconda	ary Indicators (2 or more required)
✓ Surface \			Salt Crust					ter Marks (B1) (Riverine)
	ter Table (A2)		Biotic Cru	` '				liment Deposits (B2) (Riverine)
Saturatio			Aquatic In		e (B13)			t Deposits (B3) (Riverine)
	arks (B1) (Nonri v	(orino)	Hydrogen					inage Patterns (B10)
	t Deposits (B2) (I					Living Poo		-Season Water Table (C2)
	osits (B3) (Nonri		Oxidized i	•	-	•	· · · —	yfish Burrows (C8)
	Soil Cracks (B6)	verifie)					·	uration Visible on Aerial Imagery (C9)
· · · · · · · · · · · · · · · · · · ·	, ,	al Imagany (P7	Recent Iro			iu Solis (Co	· —	illow Aquitard (D3)
	on Visible on Aeri		· —					
	ained Leaves (B9	9)	Other (Ex	piain in Re	emarks)	1	FAC	C-Neutral Test (D5)
Field Observ		v / .	5 4 6		- 44			
Surface Water			lo Depth (in					
Water Table I	Present?		lo Depth (in					,
Saturation Pr		Yes N	lo Depth (in	ches):		Wetla	and Hydrology F	Present? Yes <u>√</u> No
(includes cap Describe Rec		am gauge moi	nitoring well, aerial	photos pr	evious in	spections)	if available	
200011001100	orded Bata (et. et	arri gaago, mo	moning won, dona	priotoo, pr	ovious iii	5 p00010110), 1	ii availabio.	
Domarka								
Remarks:								

Project/Site: Morton Bay Geothermal Project	Ci	ty/County:	Imperial	County		_ Sampling [)ate:	3/12/22
Applicant/Owner: Morton Bay Geothermal LLC				State:	CA	Sampling F	oint:	S-15
Investigator(s): R. Newton, M. King	Se	ection, To	wnship, Rar	nge: <u>S23 T1</u>	1S R13E			
Landform (hillslope, terrace, etc.): lacustrine fringe	Lo	ocal relief	(concave, o	convex, none	e): <u>minor c</u>	onvex	_ Slope ((%): <u>0-1</u>
Subregion (LRR): <u>D - Interior Deserts</u>	Lat: <u>33.19</u>	99482		Long: -115	5.595645		Datum: 1	WGS 84
Soil Map Unit Name: Fluvaquents, saline				!	NWI classifi	cation: L2U	SCx	
Are climatic / hydrologic conditions on the site typical for thi	s time of year	? Yes	No	✓ (If no,	explain in F	Remarks.)		
Are Vegetation, Soil, or Hydrologys	significantly dis	sturbed?	Are "	Normal Circu	ımstances"	present? Ye	es <u>√</u>	_ No
Are Vegetation, Soil, or Hydrologyı	naturally probl	ematic?	(If ne	eded, explair	n any answe	ers in Remar	ks.)	
SUMMARY OF FINDINGS – Attach site map	showing s	amplin	g point lo	ocations,	transects	s, importa	nt featu	ıres, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes ✓ N Yes ✓ N	lo		e Sampled In a Wetlan		Yes <u>v</u>	/ No		
Fringe palustrine scrub-shrub wetland PSS- Precipitation Tool determined the area was		_			-	e Anteceo	dent	
VEGETATION – Use scientific names of plan	nts.							
Tree Stratum (Plot size:) 1)	Absolute I % Cover S	Species?	Status	Number of	e Test wor Dominant S BL, FACW,	Species	2	(A)
2				Total Numb Species Ac	per of Domi		2	(B)
4	=		ver		Dominant S BL, FACW,	Species or FAC:	100	(A/B)
1. Allenrolfea occidentalis	25	Υ	FACW	Prevalence	e Index wo	rksheet:		
2. Tamarix sp.		Υ		Total %	6 Cover of:	<u></u>	Multiply by	<u>/:</u>
3						x1=		
4						x 2 =		
5				-		x 3 =		
Herb Stratum (Plot size: 5' radius)	<u>65</u> =	Total Co	ver			x 4 =		—
1				UPL specie				<u> </u>
2				Column 10	tais:t	55 (A)	1/(<u>)</u> (B)
3.				Preva	alence Inde	x = B/A =	2.6	
4				Hydrophyt	tic Vegetati	ion Indicator	rs:	
5				·	ance Test is			
6				_	ence Index			
7						aptations ¹ (Pi		
8						phytic Veget		,
Woody Vine Stratum (Plot size:)	=	Total Co	ver			.,,	(=:	· · · · · · · · · · · · · · · · · · ·
1				¹ Indicators	of hydric so	il and wetlan	d hydrolo	gy must
2.				be present	, unless dist	turbed or pro	blematic.	
% Bare Ground in Herb Stratum 100 % Cove	=	Total Co		Hydrophyt Vegetation Present?	1	es <u>√</u>	No	
Remarks:	- Diolic Old	3t <u> </u>		1 Tesent:				_
T.C.T.G.T.C.								

US Army Corps of Engineers Arid We

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix			ox Feature	es	. 2		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0 - 3	2.5 Y 5/2	100		_		_	<u>Sa</u>	
3 - 5	7.5 YR 5/8	80		_			Sa	
	2.5 Y 5/2	20					Sa	
5 - 18	5 Y 5/2	80	7.5 YR 5/8	20	C	M	SaCl	
				_		_		
				_	_	_		
1Type: C=C	encontration D=D	onlotion DN	M=Reduced Matrix, C		od or Coo	tod Sand C	raina ² l coation: DL:	=Pore Lining, M=Matrix.
			II LRRs, unless othe			ieu Sanu G		ematic Hydric Soils ³ :
Histoso			Sandy Red		,		1 cm Muck (A9) (
	pipedon (A2)		Stripped M				2 cm Muck (A10)	
Black H	istic (A3)		Loamy Mu	-			Reduced Vertic (F18)
	en Sulfide (A4)		Loamy Gle	-			Red Parent Mate	
	d Layers (A5) (LRI uck (A9) (LRR D)	₹ C)	✓ Depleted N — Redox Dar				Other (Explain in	Remarks)
	d Below Dark Surf	ace (A11)	Redox Dai					
	ark Surface (A12)	,	Redox Dep				³ Indicators of hydroph	ytic vegetation and
	Mucky Mineral (S1))	Vernal Poo	ols (F9)			wetland hydrology	must be present,
	Gleyed Matrix (S4)						unless disturbed or	problematic.
	Layer (if present)	:						
Type:								
Depth (in	iches):						Hydric Soil Present?	Yes No
								_
HYDROLO								_
_	drology Indicator			di A			Casandan dadia	-t (2d)
		r one requir	ed; check all that app				<u> </u>	ators (2 or more required)
	Water (A1) ater Table (A2)		Salt Crus Biotic Cru	` '				s (B1) (Riverine) eposits (B2) (Riverine)
Ingri W	, ,		Aquatic I		es (B13)			ts (B3) (Riverine)
	/arks (B1) (Nonriv	erine)	Hydroger				Drainage Pa	
	nt Deposits (B2) (,	, •		` '	g Living Ro	-	Water Table (C2)
Drift De	posits (B3) (Nonri	verine)	Presence	of Reduc	ed Iron (C	C4)	Crayfish Bu	rrows (C8)
Surface	Soil Cracks (B6)		Recent Ir	on Reduc	tion in Till	ed Soils (C	6) Saturation \	isible on Aerial Imagery (C9)
·	ion Visible on Aeria		· —	k Surface	` '		Shallow Aqu	, ,
	Stained Leaves (B9))	Other (Ex	cplain in R	emarks)		✓ FAC-Neutra	I Test (D5)
Field Obser								
Surface Wat			No ✓ Depth (ii					
Water Table			No Depth (ii			-		. v / u
Saturation F (includes ca	resent? pillary fringe)	Yes <u>√</u>	No Depth (ii	nches): <u>1</u>	U	wet	land Hydrology Present	? Yes <u>√</u> No
		am gauge, r	nonitoring well, aerial	photos, p	revious ir	nspections)	, if available:	
Remarks:								

Project/Site: Morton Bay Geothermal Project	City/County: Imperia	al County	Sampling Date:	3/12/22
Applicant/Owner: Morton Bay Geothermal LLC		State: CA	Sampling Point:	S-16
Investigator(s): R. Newton	Section, Township, R	ange: <u>S23 T11S R13E</u>		
Landform (hillslope, terrace, etc.): bankslope	Local relief (concave	, convex, none): none	Slope	e (%): <u>0-5</u>
Subregion (LRR): D - Interior Deserts	Lat: <u>33.199467</u>	Long: <u>-115.595635</u>	Datum	: WGS 84
Soil Map Unit Name: Fluvaquents, saline		NWI classifi	cation: none	
Are climatic / hydrologic conditions on the site typical for				
Are Vegetation, Soil, or Hydrology	•			No
Are Vegetation, Soil, or Hydrology		needed, explain any answ		
SUMMARY OF FINDINGS – Attach site ma				tures, etc.
Hydrophytic Vegetation Present? Yes ✓	No Is the Sample			
	No. ✓		No.	
	No <u>√</u> within a Wetla	and? Yes	No <u>√</u>	
Remarks:				
Paired upland point for S-15. The Antece	edent Precipitation Tool det	ermined the area w	as drier than no	ormal at
the time of sampling.				
VEGETATION – Use scientific names of p	lants.			
Trac Stratum (Plat size:	Absolute Dominant Indicator			
Tree Stratum (Plot size:) 1	% Cover Species? Status	 Number of Dominant S That Are OBL, FACW, 		(Δ)
2.				(/\)
3.		Total Number of Domi Species Across All Str		(B)
4		Percent of Dominant S		
0 1 (0) 1 0 1 (0) 1 (0) 1 (12) 20 (14)	= Total Cover	That Are OBL, FACW,		(A/B)
Sapling/Shrub Stratum (Plot size: 12 x 20 ft.) 1. Allenrolfea occidentalis	25 V EACW	Prevalence Index wo	rkshoot:	
2.		Total % Cover of:		hv.
3.		OBL species		-
4.		FACW species 25		
5.		FAC species	x 3 =	
Flunding)	= Total Cover	FACU species	x 4 =	
Herb Stratum (Plot size: 5' radius)		UPL species		
1		- Column Totals:2	25 (A) <u>5</u>	60 (B)
2 3		- Prevalence Inde	x = B/A =2.0)
4.		Hydrophytic Vegetat		
5.		✓ Dominance Test is	s >50%	
6		✓ Prevalence Index		
7		Morphological Ada	aptations ¹ (Provide s ks or on a separate s	upporting
8		Problematic Hydro	•	•
Woody Vine Stratum (Plot size:)	0 = Total Cover		opy ao 10go taao (_/.p/
1		¹ Indicators of hydric so	oil and wetland hydro	logy must
2.		be present, unless dis	turbed or problemation) .
	= Total Cover	Hydrophytic		
% Bare Ground in Herb Stratum 100 % C	over of Biotic Crust0	Vegetation Present? Yes	es <u>√</u> No	
Remarks:		I		

(inches) Color (moist) % Color (moist) % Type Log* Texture Remarks 7.5 YR 6/2 100 Sa 20% road fill; Typha litter 3-19 7.5 YR 6/2 100 Sa 20% road fill; Typha litter 3-19 7.5 YR 6/2 100 Sa 20% road fill; Typha litter 3-19 7.5 YR 6/2 100 Sa 20% road fill; Typha litter 3-19 7.5 YR 6/2 100 Sa 20% road fill; Typha litter 5-2	Depth	Matrix	<u></u> %	Redox Features	e ¹ Loc ²	Texture	Domarka
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains Location: PL=Pore Lining, M=Matrix, Plydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Indicators (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Indicators for Muck (Ap) (LRR B) Red Parent Material (TF2) Red Parent Parent (TF2) Red Pare		-					
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ^2Location: PL=Pore Lining, M=Matrix, Ptyric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: 1 cm Muck (A9) (LRR C) Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR C) Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR C) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Reduced Vertic (F18) Hydrogen Sulfide (A9) (LRR C) Redox Dark Surface (F7) Thick Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Dark Surface (F7) Thick Dark Surface (A12) Redox Dark Surface (F9) Vernal Pools (F9) Vern							~20% road fill; Typna litter
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)	3-19	7.5 YR 6/2	_ <u>100</u> _			Sa	
Histosol (A1)							
Histosol (A1)							
Histosol (A1)							
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)							
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)							
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)							
Histosol (A1) Sandy Redox (S5) 1 cm Muck (A9) (LRR C) Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) 2 com Muck (A10) (LRR B) Black Histic (A3) 4 comy Cleyed Matrix (F2) Redox Dark (F1) Redox Dark (F1) Hydrogen Sulfide (A4) 4 comy Cleyed Matrix (F2) Red Parent Material (TF2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Redox Depressions (F8) Aindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No ✓ Wetland Hydrology indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Surface Water (A1) Salt Crust (B11) Water Table (A2) Biotic Crust (B12) Sediment Deposits (B3) (Riverine) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Sediment Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C5) Ininudation Visible on Aerial Imagery (C7) Shallow Aquitard (D3) Water Table (Das) Ves No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Includes capillary fringe)					oated Sand Gr		
Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3)	-		cable to all Li	RRs, unless otherwise noted.)			· ·
Black Histic (A3)							
Hydrogen Sulfide (A4)							, , , ,
Stratified Layers (A5) (LRR C)		` '		, , ,		_	` ,
a com Muck (A9) (LRR D)			C \				
Depleted Below Dark Surface (A11)			C)			Other	(Explain in Remarks)
Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present):			ce (A11))		
Sandy Mucky Mineral (S1)			<i>(</i> (, , , ,)		,	³ Indicators	s of hydrophytic vegetation and
Sandy Gleyed Matrix (S4) unless disturbed or problematic. Restrictive Layer (if present): Type:							
Type:	Sandy G	Bleyed Matrix (S4)					
Popth (inches):	Restrictive I	Layer (if present):					
## Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Type:			_			
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Salt Crust (B11) Aquatic Invertebrates (B13) Water Marks (B1) (Riverine) Saturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B2) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Sediment Deposits (B3) (Riverine) Water Marks (B1) (Nonriverine) Saturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B3) (Riverine) Drift Deposits (B3) (Riverine) Sediment Deposits (B3) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Secondary Indicators (2 or more required) Water Table Deposits (B3) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B3) (Riverine) Drift Deposits (B2) (Riverine) Drift Depo	Depth (inc	ches):				Hydric Soi	l Present? Yes No <u>√</u>
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No ✓ Depth (inches): Water Table Present? Yes No ✓ Depth (inches): Saturation Present? Yes No ✓ Depth (inches): Sediment Deposits (B1) (Riverine) Wetland Hydrology Present? Yes No ✓ Depth (inches): Wetland Hydrology Present? Yes No ✓ Depth (inches): Wetland Hydrology Present? Yes No ✓ Depth (inches): Sediment Deposits (B1) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B1) Sediment Deposits (B2) (Riverine) Sediment Deposits (B1) S	Remarks:					I .	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Sult Crust (B11) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No ✓ Depth (inches): Water Table Present? Yes No ✓ Depth (inches): Wetland Hydrology Present? Yes No ✓ Depth (inches): Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	VDBOLO	CV					
Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Surface Water (A1) High Water Table (A2) Saturation (A3) Aquatic Invertebrates (B13) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Dry-Season Water							
Surface Water (A1) Salt Crust (B11) Water Marks (B1) (Riverine) High Water Table (A2) Biotic Crust (B12) Sediment Deposits (B2) (Riverine) Saturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B3) (Riverine) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	_			check all that annly)		Seco	ndary Indicators (2 or more required)
High Water Table (A2)		•	one required,				
		` ,					, , ,
Water Marks (B1) (Nonriverine)					2)		
Sediment Deposits (B2) (Nonriverine)		` '			•	· · · · · · · · · · · · · · · · · · ·	, , , , , ,
Drift Deposits (B3) (Nonriverine)		` , `	,				` '
Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9 Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Surface Water Present?		. , , ,	•				
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Stail Observations: Surface Water Present?		, , ,	erine)			· · · · · · · · · · · · · · · · · · ·	
Water-Stained Leaves (B9) Other (Explain in Remarks) ✓ FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No ✓ Depth (inches): Water Table Present? Yes No ✓ Depth (inches): Saturation Present? Yes No ✓ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Sunace		Imagory (P7)		i illed Solls (CC	<i></i>	5 , \
Field Observations: Surface Water Present? Yes No _ ✓ Depth (inches): Water Table Present? Yes No _ ✓ Depth (inches): Saturation Present? Yes No _ ✓ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		UII VISIDIE UII AEIIAI	0 , ,		-)		. , ,
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Operation Present? Yes No Ope	Inundation	tained Leaves (RO)		Other (Explain in Nemarks	· · · · · · · · · · · · · · · · · · ·	'	Ac-Neutral Test (D3)
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Depth (inches): Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Inundatio	. ,		<u> </u>			
Saturation Present? Yes No ✓ _ Depth (inches):	Inundation Water-Similary Field Observing	vations:) V Denth (inches):			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Inundation Water-S Field Observ Surface Water	vations: er Present?	Yes No				
	Inundation Water-S Field Observing Surface Water Water Table	vations: er Present?	Yes No	Depth (inches):			The Property of the State of th
Remarks:	Inundation Water-S Field Observ Surface Wate Water Table Saturation Procession	vations: er Present? Present? resent? pillary fringe)	Yes No Yes No Yes No	Depth (inches): Depth (inches):	Wetl		gy Present? Yes No _ ✓
Remarks:	Inundation Water-S Field Observ Surface Water Water Table Saturation Proposition (includes cape	vations: er Present? Present? resent? pillary fringe)	Yes No Yes No Yes No	Depth (inches): Depth (inches):	Wetl		gy Present? Yes No <u>√</u>
	Inundation Water-S Field Observiole Surface Water Water Table Saturation Provided (includes cape) Describe Recommendation	vations: er Present? Present? resent? pillary fringe)	Yes No Yes No Yes No	Depth (inches): Depth (inches):	Wetl		gy Present? Yes No _ ✓
	Inundation Water-S Field Observ Surface Water Water Table Saturation Profits (includes cape) Describe Recommendation	vations: er Present? Present? resent? pillary fringe)	Yes No Yes No Yes No	Depth (inches): Depth (inches):	Wetl		gy Present? Yes No <u>√</u>
	Inundation Water-S Field Observiole Surface Water Water Table Saturation Provided Cap Cincludes cap Describe Recomment	vations: er Present? Present? resent? pillary fringe)	Yes No Yes No Yes No	Depth (inches): Depth (inches):	Wetl		gy Present? Yes No _ ✓
	Inundation Water-S Field Observiole Surface Water Water Table Saturation Provided (includes cape) Describe Recommendation	vations: er Present? Present? resent? pillary fringe)	Yes No Yes No Yes No	Depth (inches): Depth (inches):	Wetl		gy Present? Yes No <u>√</u>

Project/Site: Morton Bay Geothermal Project	Ci	ty/County: Imperial	County	Sampling Date:3/12/22
Applicant/Owner: Morton Bay Geothermal LLC			State: <u>CA</u>	_ Sampling Point:S-17
Investigator(s): R. Newton, M. King	Se	ection, Township, Ra	inge: S23 T11S R13E	
Landform (hillslope, terrace, etc.): lake fringe	Lo	ocal relief (concave,	convex, none): minor o	concave Slope (%): <u>0-2</u>
Subregion (LRR): <u>D - Interior Deserts</u>	Lat: <u>33.19</u>	943	Long: <u>-115.595505</u>	Datum: WGS 84
Soil Map Unit Name: Fluvaquents, saline			NWI classif	ication: L2USCx/L1UBHx
Are climatic / hydrologic conditions on the site typical for	this time of year	? Yes No _	✓ (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology	significantly dis	sturbed? Are	"Normal Circumstances"	present? Yes <u>√</u> No
Are Vegetation, Soil, or Hydrology	naturally probl	ematic? (If ne	eeded, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing s	ampling point I	ocations, transect	s, important features, etc.
Lludraphytia Vagatatian Dracent?	No			
	No <u>√</u>	Is the Sampleo		
Wetland Hydrology Present? Yes		within a Wetla	nd? Yes	No_ <u>√</u>
Remarks:		L		
Potential PSS wetland found to be lacking	g hydric soil a	and wetland hy	drology indicators	. Area is riparian. The
Antecedent Precipitation Tool determine	- •	•	~ .	•
VEGETATION – Use scientific names of pl				
VEGETATION - Use scientific flames of pr		Dominant Indicator	Dominance Test wor	
Tree Stratum (Plot size:)	% Cover S	Species? Status	Number of Dominant	
1			That Are OBL, FACW	
2			Total Number of Domi	inant
3			Species Across All Str	
4			Percent of Dominant S	Species
Sapling/Shrub Stratum (Plot size: 12 ft x 20 ft)	=	Total Cover		, or FAC:1 (A/B)
1. Tamarix sp.	75	Y FAC	Prevalence Index wo	orksheet:
2.			Total % Cover of:	Multiply by:
3			OBL species	x 1 =
4			FACW species	x 2 =
5			•	x 3 = <u>225</u>
Herb Stratum (Plot size: 5' radius)	75=	Total Cover		x 4 =
			UPL species	
1 2			Column Totals:	75 (A) <u>225</u> (B)
3			Prevalence Inde	ex = B/A =
4			Hydrophytic Vegetat	ion Indicators:
5			✓ Dominance Test i	s >50%
6			✓ Prevalence Index	
7				aptations ¹ (Provide supporting ks or on a separate sheet)
8				ophytic Vegetation ¹ (Explain)
Woody Vino Stratum (Plot size:	=	Total Cover	Troblematic Tryan	Spriyile vegetation (Explain)
Woody Vine Stratum (Plot size:) 1			¹ Indicators of hydric se	oil and wetland hydrology must
2.				turbed or problematic.
		Total Cover	Hydrophytic	
% Bare Ground in Herb Stratum 100 % Co			Vegetation	an d No
	over or biolic Cru	st	Present? Y	es√ No
Remarks:				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix			x Features	3			
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type ¹	Loc ²	<u>Texture</u>	<u>Remarks</u>
<u>0 - 18</u>	7.5 YR 4/3	_ <u>100</u>					<u>Sa</u>	
				·				
1- 0.0							. 2	
	oncentration, D=De Indicators: (Appli					d Sand Gi		Location: PL=Pore Lining, M=Matrix. ors for Problematic Hydric Soils ³ :
-		Cable to all L			:u.)			•
Histosol			Sandy Redo Stripped Ma					m Muck (A9) (LRR C) m Muck (A10) (LRR B)
	pipedon (A2) istic (A3)		Surpped Ma		(F1)			duced Vertic (F18)
	en Sulfide (A4)		Loamy Gley	-				Parent Material (TF2)
	d Layers (A5) (LRR	C)	Depleted Ma		(1 2)		·	er (Explain in Remarks)
	uck (A9) (LRR D)	-,	Redox Dark		F6)		•	o. (p.a toao)
	d Below Dark Surfa	ce (A11)	Depleted Da	•	,			
Thick D	ark Surface (A12)		Redox Depr	essions (F	- 8)		3Indicato	ors of hydrophytic vegetation and
Sandy N	Mucky Mineral (S1)		Vernal Pools	s (F9)			wetla	nd hydrology must be present,
	Gleyed Matrix (S4)						unles	s disturbed or problematic.
Restrictive	Layer (if present):							
Type:								
Depth (in	ches):		<u></u>				Hydric S	oil Present? Yes No <u>√</u>
Remarks:							•	
HYDROLO								
_	drology Indicators						_	
	cators (minimum of	one required;					<u>Se</u>	condary Indicators (2 or more required)
	Water (A1)		Salt Crust	. ,				Water Marks (B1) (Riverine)
•	ater Table (A2)		Biotic Crus					Sediment Deposits (B2) (Riverine)
Saturati			Aquatic Inv					Drift Deposits (B3) (Riverine)
	Marks (B1) (Nonrive		Hydrogen					Drainage Patterns (B10)
· · · · · · · · · · · · · · · · · · ·	nt Deposits (B2) (No	•				_		Dry-Season Water Table (C2)
	posits (B3) (Nonriv	erine)	Presence of				·	Crayfish Burrows (C8)
	Soil Cracks (B6)	. (57)	Recent Iro			d Soils (Ce		Saturation Visible on Aerial Imagery (C9)
· · · · · · · · · · · · · · · · · · ·	ion Visible on Aerial		·	•	•			Shallow Aquitard (D3)
	Stained Leaves (B9)		Other (Exp	iain in Rei	marks)			FAC-Neutral Test (D5)
Field Obser								
Surface Wat			o <u>√</u> Depth (inc					
Water Table			o <u>√</u> Depth (inc			l l		,
Saturation P		Yes N	o <u>✓</u> Depth (inc	ches):		Wetl	and Hydrol	ogy Present? Yes No <u>√</u>
	pillary fringe) corded Data (strear	n gauge, mor	nitoring well, aerial r	hotos nre	evious ins	pections)	if available:	
200020 . 10		gaage,e.		o.oo, p. c		poot,		
Remarks:								
Nemaiks.								

Project/Site: Morton Bay Geothermal Project	City/County: Imper	rial County	Sampling Date: 3/12/22				
Applicant/Owner: Morton Bay Geothermal LLC		State: CA	Sampling Point: S-18				
vestigator(s): R. Newton, M. King Section, Township, Range: S22 T11S R13E							
Landform (hillslope, terrace, etc.): impounded lake	Local relief (concav	/e, convex, none): concave	Slope (%): <u>0</u>				
Subregion (LRR): D - Interior Deserts	Lat: _33.201662	Long: -115.597179	Datum: WGS 84				
Are climatic / hydrologic conditions on the site typical for							
Are Vegetation, Soil, or Hydrology	•		present? Yes <u>√</u> No				
Are Vegetation, Soil, or Hydrology		f needed, explain any answ					
SUMMARY OF FINDINGS – Attach site ma							
Hydrophytic Vegetation Present? Yes ✓	No Is the Same						
	No.		<i>(</i>				
	No within a We	tland? Yes	No <u>√</u>				
Remarks:		-					
NWI-mapped excavated impounded lake	L1UBHx-1. The Antecede	nt Precipitation Tool	determined the area				
was drier than normal at the time of sam	pling.						
VEGETATION – Use scientific names of pl	lants.						
	Absolute Dominant Indicate		ksheet:				
Tree Stratum (Plot size:)	<u>% Cover Species? Status</u>	I Number of Dominant					
1		That Are OBL, FACW,	, or FAC:1 (A)				
2 3		Total Number of Domi					
4		Species Across All Str	rata: <u>1</u> (B)				
	= Total Cover	Percent of Dominant SThat Are OBL, FACW,					
Sapling/Shrub Stratum (Plot size: 15' radius)			- , ,				
Allenrolfea occidentalis							
2			Multiply by:				
3			x 1 = x 2 =40				
5			x 3 =				
	20 = Total Cover		x 4 =				
Herb Stratum (Plot size: 5' radius)		UPL species	x 5 =				
1		— Column Totals:2	<u>20</u> (A) <u>40</u> (B)				
2		— Prevalence Inde	x = B/A = 2.0				
3		Hydrophytic Vegetati					
4. 5.							
6.		/ Prevalence Index					
7			aptations ¹ (Provide supporting				
8.			ks or on a separate sheet)				
	= Total Cover	Problematic Hydro	ophytic Vegetation ¹ (Explain)				
Woody Vine Stratum (Plot size:)		¹ Indicators of hydric so	oil and wetland hydrology must				
1		be present, unless dis					
2	= Total Cover	Hydrophytic					
0/ Bara Crawad in Harb Stratura 100 0/ Co		Vegetation	aa / Na				
% Bare Ground in Herb Stratum 100 % Co	over of Biotic Crust0	Present? Yo	es No				
Inclinates.							

Profile Description: Depth	Matrix		Redo	x Feature	s			
		% Co	lor (moist)	<u> </u>	Type ¹	Loc ²	Texture	Remarks
								_
							-	
				_			-	
								- -
¹ Type: C=Concentration						d Sand Gr	ains. ² L	ocation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators	s: (Applicable	to all LRRs,	unless othe	rwise not	ed.)		Indicato	rs for Problematic Hydric Soils ³ :
Histosol (A1)			_ Sandy Red	ox (S5)			1 cm	n Muck (A9) (LRR C)
Histic Epipedon (A	(2)		Stripped M					n Muck (A10) (LRR B)
Black Histic (A3)	,	· 	Loamy Muc		l (F1)		·	uced Vertic (F18)
Hydrogen Sulfide	(A4)	· 	Loamy Gle					Parent Material (TF2)
Stratified Layers (· 	Depleted M	•	` /			er (Explain in Remarks)
1 cm Muck (A9) (L			Redox Dar	` ,	(F6)		_	
Depleted Below D		<u></u>	_ Depleted D		. ,			
Thick Dark Surfac	•	,	_ . _ Redox Dep				3Indicato	rs of hydrophytic vegetation and
Sandy Mucky Min			Vernal Poo		,			nd hydrology must be present,
Sandy Gleyed Ma				,				s disturbed or problematic.
Restrictive Layer (if p								·
_								
Type:							Hydric S	nil Prosent? Vos No
_							Hydric So	oil Present? Yes No
Type: Depth (inches): Remarks: Soils not investig							Hydric So	oil Present? Yes No
Type:	gated.						Hydric So	oil Present? Yes No
Type: Depth (inches): Remarks: Soils not investig	gated.							
Type: Depth (inches): Remarks: Soils not investig HYDROLOGY Wetland Hydrology In Primary Indicators (min	rated. Indicators: Indicator one re		- ' '					condary Indicators (2 or more required)
Type: Depth (inches): Remarks: Soils not investig	rated. Indicators: Indicator one re		sk all that app Salt Crust				Sec	condary Indicators (2 or more required) Water Marks (B1) (Riverine)
Type: Depth (inches): Remarks: Soils not investig HYDROLOGY Wetland Hydrology In Primary Indicators (min	gated. Indicators: Inimum of one records	equired; chec	- ' '	: (B11)			Sec	condary Indicators (2 or more required)
Type:	gated. Indicators: Inimum of one records	equired; chec	Salt Crust	: (B11) st (B12)	es (B13)		<u>Sec</u>	condary Indicators (2 or more required) Water Marks (B1) (Riverine)
Type:	rated. Indicators: Inimum of one records (A2)	equired; chec - - -	Salt Crust Biotic Cru	: (B11) st (B12) evertebrate			Sec —	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Type:	rated. Indicators: Inimum of one record (A2) (Nonriverine)	equired; chec - - - -	Salt Crust Biotic Cru Aquatic In Hydrogen	st (B11) st (B12) evertebrate Sulfide O	dor (C1)	Living Roo	Sec	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Type:	gated. Indicators: Inimum of one reconstruction (A2) (Nonriverine) Is (B2) (Nonriverine)	equired; chec - - - - erine)	Salt Crust Biotic Cru Aquatic In Hydrogen	st (B11) st (B12) evertebrate Sulfide O	dor (C1) res along	•	<u>Sec</u>	water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type:	gated. Indicators: Inimum of one reconstruction (A2) (Nonriverine) (S (B2) (Nonriverine) (Nonriverine)	equired; chec - - - - erine) _	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence	st (B11) st (B12) evertebrate Sulfide O Rhizosphe of Reduce	dor (C1) res along ed Iron (C4	1)	<u>Sec</u> ts (C3)	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Type:	gated. Indicators: Inimum of one reconstruction (A2) (Nonriverine) (S (B2) (Nonriverine) (S (B6)	equired; chec - - - - erine) _ -	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Iro	st (B11) st (B12) evertebrate Sulfide Or Rhizosphe of Reduce on Reducti	dor (C1) res along ed Iron (C4 on in Tilled	1)	Sec ————————————————————————————————————	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS
Type:	gated. Indicators: Inimum of one reconstruction (A2) (Nonriverine) Is (B2) (Nonriverine) Is (B6)	equired; chec - - - - erine) _ -	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Iro Thin Mucl	st (B11) st (B12) evertebrate Sulfide O Rhizosphe of Reduce on Reducti c Surface (dor (C1) res along ed Iron (C4 on in Tilled (C7)	1)	<u>Sec</u>	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Type:	gated. Indicators: Inimum of one reconstruction (A2) (Nonriverine) Is (B2) (Nonriverine) Is (B6)	equired; chec - - - - erine) _ -	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Iro	st (B11) st (B12) evertebrate Sulfide O Rhizosphe of Reduce on Reducti c Surface (dor (C1) res along ed Iron (C4 on in Tilled (C7)	1)	<u>Sec</u>	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS
Type:	gated. Indicators: Inimum of one record (A2) (Nonriverine) Is (B2) (Nonriverine) Is (B6) Is	equired; chec - - erine) _ - ery (B7) _	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Iro Thin Mucl	t (B11) st (B12) evertebrate Sulfide O Rhizosphe of Reduce on Reducti c Surface (plain in Re	dor (C1) res along ed Iron (C4 on in Tilled (C7) emarks)	1)	<u>Sec</u>	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Type:	(A2) (Nonriverine) (S (B2) (Nonriverine) (S (B6) (On Aerial Imagaves (B9) Yes	equired; checomers of the company of	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Iro Thin Mucl Other (Ex	st (B11) st (B12) evertebrate Sulfide Or Rhizosphe of Reduce on Reducti c Surface (plain in Re	dor (C1) res along ed Iron (C4 on in Tilled (C7) emarks)	l) d Soils (C6	<u>Sec</u>	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Type:	(A2) (Nonriverine) (S (B2) (Nonriverine) (S (B6) (On Aerial Imagaves (B9) Yes	equired; checomers of the company of	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Iro Thin Mucl	st (B11) st (B12) evertebrate Sulfide Or Rhizosphe of Reduce on Reducti c Surface (plain in Re	dor (C1) res along ed Iron (C4 on in Tilled (C7) emarks)	t) d Soils (C6	<u>Sec</u>	water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	(A2) (Nonriverine) (S (B2) (Nonriverine) (S (B6) (On Aerial Imagraves (B9) Yes	equired; chec	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Iro Thin Mucl Other (Ex	st (B11) st (B12) svertebrate Sulfide O Rhizosphe of Reduce on Reducti c Surface (plain in Re uches): ches):	dor (C1) res along ed Iron (C4 on in Tilled (C7) emarks)	t) d Soils (C6	<u>Sec</u>	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Type:	(A2) (Nonriverine) (S (B2) (Nonriverine) (S (B6) On Aerial Imagaves (B9) T? Yes _ Yes _ Yes _ ge)	equired; chec	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Thin Mucl Other (Ex Depth (ir Depth (ir	st (B11) st (B12) evertebrate Sulfide Or Rhizosphe of Reduce on Reducti c Surface (plain in Re aches): aches):	dor (C1) ures along ed Iron (C4 on in Tilled (C7) emarks)	d Soils (C6	sec 	water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	(A2) (Nonriverine) (S (B2) (Nonriverine) (S (B6) On Aerial Imagaves (B9) T? Yes _ Yes _ Yes _ ge)	equired; chec	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Thin Mucl Other (Ex Depth (ir Depth (ir	st (B11) st (B12) evertebrate Sulfide Or Rhizosphe of Reduce on Reducti c Surface (plain in Re aches): aches):	dor (C1) ures along ed Iron (C4 on in Tilled (C7) emarks)	d Soils (C6	sec 	water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	(A2) (Nonriverine) (S (B2) (Nonriverine) (S (B6) On Aerial Imagaves (B9) T? Yes _ Yes _ Yes _ ge)	equired; chec	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Thin Mucl Other (Ex Depth (ir Depth (ir	st (B11) st (B12) evertebrate Sulfide Or Rhizosphe of Reduce on Reducti c Surface (plain in Re aches): aches):	dor (C1) ures along ed Iron (C4 on in Tilled (C7) emarks)	d Soils (C6	sec 	water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	gated. Indicators: Inimum of one reconstruction (A2) (Nonriverine) (S (B2) (Nonriverine) (S (B6) On Aerial Imagraves (B9) If? Yes Yes Yes ge) Inta (stream gauges)	equired; chec	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Thin Mucl Other (Ex Depth (ir Depth (ir	st (B11) st (B12) evertebrate Sulfide Or Rhizosphe of Reduce on Reducti c Surface (plain in Re aches): aches):	dor (C1) ures along ed Iron (C4 on in Tilled (C7) emarks)	d Soils (C6	sec 	water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	gated. Indicators: Inimum of one reconstruction (A2) (Nonriverine) (S (B2) (Nonriverine) (S (B6) On Aerial Imagraves (B9) If? Yes Yes Yes ge) Inta (stream gauges)	equired; chec	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Thin Mucl Other (Ex Depth (ir Depth (ir	st (B11) st (B12) evertebrate Sulfide Or Rhizosphe of Reduce on Reducti c Surface (plain in Re aches): aches):	dor (C1) ures along ed Iron (C4 on in Tilled (C7) emarks)	d Soils (C6	sec 	water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	gated. Indicators: Inimum of one reconstruction (A2) (Nonriverine) (S (B2) (Nonriverine) (S (B6) On Aerial Imagraves (B9) If? Yes Yes Yes ge) Inta (stream gauges)	equired; chec	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Thin Mucl Other (Ex Depth (ir Depth (ir	st (B11) st (B12) evertebrate Sulfide Or Rhizosphe of Reduce on Reducti c Surface (plain in Re aches): aches):	dor (C1) ures along ed Iron (C4 on in Tilled (C7) emarks)	d Soils (C6	sec 	water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS Shallow Aquitard (D3) FAC-Neutral Test (D5)

Project/Site: Morton Bay Geothermal Project	Ci	ty/County:	<u>Imperial</u>	County	;	Sampling Date: _	3/12/22
Applicant/Owner: Morton Bay Geothermal LLC				State:	CA	Sampling Point:	S-19
Investigator(s): R. Newton, M. King	S	ection, To	wnship, Rar	nge: <u>S23 T11S F</u>	R13E		
Landform (hillslope, terrace, etc.): <u>abandoned industrial</u>	pond L	ocal relief	(concave, o	convex, none): <u>n</u>	one	Slop	oe (%):0
Subregion (LRR): <u>D - Interior Deserts</u>	Lat: _33.20	01999		Long: -115.58	7884	Datu	m: WGS 84
Soil Map Unit Name: Meloland very fine sandy loam, v							
Are climatic / hydrologic conditions on the site typical for this							
Are Vegetation, Soil, or Hydrologys				Normal Circumst			/ No
Are Vegetation, Soil, or Hydrology r				eded, explain an			
SUMMARY OF FINDINGS – Attach site map						,	atures, etc.
Hydrophytic Vegetation Present? Yes✓ N	lo.						
Hydric Soil Present? Yes N			e Sampled			/	
Wetland Hydrology Present? Yes ✓ N		with	in a Wetlan	id? Y	es	No✓	Ē
Remarks:		I					
Area mapped by NHD as an intermittent reservoir and NWI as P							
Salton Sea began receding. Hydric soils and surface soil cracks a the time of sampling.	re likely relictu	iai. The An	tecedent Pre	ecipitation rooi det	erminea ti	ne area was drier t	nan normai at
VEGETATION – Use scientific names of plan	ıts						
VEGETATION OSC SCICILING NAMES OF Plant	Absolute	Dominant	Indicator	Dominance Te	st works	heet:	
Tree Stratum (Plot size:)	% Cover			Number of Don			
1				That Are OBL,	FACW, or	FAC: 1	(A)
2				Total Number of		· ·	
3				Species Across	All Strata	a: <u>1</u>	(B)
4	=			Percent of Dom			0 (4.75)
Sapling/Shrub Stratum (Plot size: 15' radius)		- Total Co	vei	That Are OBL,	FACW, or	FAC: 10	<u>0</u> (A/B)
1. Allenrolfea occidentalis	10	Υ	FACW	Prevalence Inc			
2						<u>Multiply</u>	_
3						x 1 =	
4						x 2 =	
5	10 -	= Total Co				x 3 = x 4 =	
Herb Stratum (Plot size: 5' radius)		- Total Co	vei			x5=	
1				Column Totals:			20 (B)
2					_		
3						= B/A =2	.0
4				Hydrophytic V			
5				✓ Dominance ✓ Prevalence			
6				l 		ations ¹ (Provide	supporting
7 8				data in	Remarks	or on a separate	sheet)
0		= Total Co	ver	Problemati	c Hydropl	nytic Vegetation ¹	(Explain)
Woody Vine Stratum (Plot size:)				1			
1						and wetland hydr bed or problema	
2						204 0. p. 02.0a	
		= Total Co	ver	Hydrophytic Vegetation			
% Bare Ground in Herb Stratum 100 % Cove	r of Biotic Cru	ıst0		Present?	Yes	No	
Remarks:							

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix			ox Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 3	7.5 YR 3/2	100					SiCl	
3 - 17	7.5 YR 4/2	95	5 YR 4/6	5	С	М	Sa	
				_	-			
			-			· ——		
				_				
1								
			=Reduced Matrix, C			ed Sand G		ation: PL=Pore Lining, M=Matrix.
-		cable to all	LRRs, unless othe		ea.)			for Problematic Hydric Soils ³ :
Histosol	` '		✓ Sandy Red	, ,				luck (A9) (LRR C)
	oipedon (A2) stic (A3)		Stripped M Loamy Mud		J (E1)			luck (A10) (LRR B) ed Vertic (F18)
	en Sulfide (A4)		Loamy Gle	-				rent Material (TF2)
	d Layers (A5) (LRR	C)	Depleted M		(12)			Explain in Remarks)
	uck (A9) (LRR D)	O)	Redox Dar	, ,	(F6)		outer (explain in Remarks)
	d Below Dark Surfa	ce (A11)	Depleted D		` '			
	ark Surface (A12)	, ,	Redox Dep				³ Indicators of	of hydrophytic vegetation and
Sandy M	Mucky Mineral (S1)		Vernal Poo	ls (F9)			wetland h	nydrology must be present,
	Gleyed Matrix (S4)						unless di	sturbed or problematic.
Restrictive I	Layer (if present):							
Type:								
Depth (in	ches):						Hydric Soil I	Present? Yes <u>√</u> No
Remarks:								
Hydric so	ils likely relictu	ıal from	before the Salt	on Sea	recede	ed.		
HYDROLO								
_	drology Indicators		d. ab - ab - all 4b at	L A			0	dan da dia dan (O an manana manina di
		one require	ed; check all that app					dary Indicators (2 or more required)
	Water (A1)		Salt Crust	. ,				ater Marks (B1) (Riverine)
_ ~	ater Table (A2)		Biotic Cru					ediment Deposits (B2) (Riverine)
Saturation			Aquatic In					rift Deposits (B3) (Riverine)
	larks (B1) (Nonrive	,	Hydrogen					rainage Patterns (B10)
	nt Deposits (B2) (No	,			_	_		ry-Season Water Table (C2)
	posits (B3) (Nonrive	erine)	Presence		•	•		rayfish Burrows (C8)
	Soil Cracks (B6)					ed Soils (Ce		aturation Visible on Aerial Imagery (C9)
	on Visible on Aerial	• • •	· —					nallow Aquitard (D3)
	tained Leaves (B9)		Other (Ex	plain in Re	emarks)		_ <u>√</u> FA	AC-Neutral Test (D5)
Field Obser								
Surface Wat			No <u>✓</u> Depth (in			l l		
Water Table			No <u>✓</u> Depth (in					
Saturation P (includes car	oillary fringe)		No <u>✓</u> Depth (in					Present? Yes <u>√</u> No
Describe Re	corded Data (strear	n gauge, m	onitoring well, aerial	photos, pr	revious in	spections),	if available:	
Remarks:								
Surface so	oil cracks are li	kelv reli	ctual from whe	n this a	rea wa	s inund:	ated.	
Ju. 1466 J	on or dono di c il	,	Jaan Holli Will			and		

Project/Site: Morton Bay Geothermal Project	City/Cour	nty: <u>Imperial</u>	County	Sam	npling Date: _	3/12/22
Applicant/Owner: Morton Bay Geothermal LLC			State:	CA Sam	pling Point: _	S-20
Investigator(s): R. Newton, M. King	Section, ⁻	Township, Rar	nge: <u>S24 T11S R</u>	13E		
Landform (hillslope, terrace, etc.): <u>abandoned indust</u>	rial pond Local rel	ief (concave, c	convex, none): <u>no</u>	ne	Slop	oe (%): 0
Subregion (LRR): <u>D - Interior Deserts</u>	Lat: 33.198964		Long: -115.576	5737	Datur	n: WGS 84
Soil Map Unit Name: Imperial silty clay, wet						
Are climatic / hydrologic conditions on the site typical for						
Are Vegetation, Soil, or Hydrology			Normal Circumsta			' No
Are Vegetation, Soil, or Hydrology			eded, explain any			
SUMMARY OF FINDINGS – Attach site ma					,	atures, etc.
Hydrophytic Vegetation Present? Yes ✓	No le					
	No 🗸	the Sampled			/	
	Nowi	thin a Wetlan	d? Ye	s	No <u>√</u>	
Remarks:						
Area mapped by NHD as an intermittent reservoir and NWI of industrial ponds likely abandoned when the Salton Sea by						
time of sampling.	egan receding. The Anteced	uent Precipitati	on roor determined	i tile alea was	uner mannor	ilidi at tile
VEGETATION – Use scientific names of p	lants.					
	Absolute Domina	nt Indicator	Dominance Tes	st workshee	t:	
Tree Stratum (Plot size:)	% Cover Species		Number of Dom			
1			That Are OBL, F	ACW, or FA	.C: <u>1</u>	(A)
2			Total Number of			
3			Species Across	All Strata:	1	(B)
4	= Total (Percent of Dom			0 (4/5)
Sapling/Shrub Stratum (Plot size: 15' radius)			That Are OBL, F	ACW, or FA	.C: <u>10</u>	<u>0</u> (A/B)
1. Allenrolfea occidentalis	<u>20</u> Y	FACW	Prevalence Ind			
2			Total % Co			-
3			OBL species			
4			FACW species FAC species			
5		Cover	FACU species			
Herb Stratum (Plot size: 5' radius)		Juvei	UPL species			
1			Column Totals:			40 (B)
2						
3					A = 2.	.0
4			Hydrophytic Ve ✓ Dominance			
5			✓ Prevalence			
6 7					ns¹ (Provide	supporting
8			data in F	Remarks or o	n a separate	sheet)
		Cover	Problemation	Hydrophytic	C Vegetation ¹	(Explain)
Woody Vine Stratum (Plot size:)			1			
1			¹ Indicators of hy be present, unle			
2			Hydrophytic		•	
	= Total (Vegetation			
	over of Biotic Crust	0	Present?	Yesv	<u>/ No</u>	
Remarks:						

Depth	cription: (Describe Matrix	•		ox Feature				•
(inches)	Color (moist)	% (Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 18	7.5 YR 4/3	100					SaCl	
				_				
							-	
				_				
1- 00							. 2.	
	oncentration, D=Dep Indicators: (Applic					ed Sand G		cation: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
-					eu.)			
Histosol	pipedon (A2)		Sandy Red Stripped M					Muck (A9) (LRR C) Muck (A10) (LRR B)
	istic (A3)		Suipped W		I (F1)			ced Vertic (F18)
	en Sulfide (A4)		Loamy Gle	-	. ,			Parent Material (TF2)
	d Layers (A5) (LRR	C)	Depleted M	-	(- –)			(Explain in Remarks)
	uck (A9) (LRR D)	,	Redox Dar	k Surface ((F6)		· 	
Deplete	d Below Dark Surfac	e (A11)	Depleted D					
	ark Surface (A12)		Redox Dep		F8)			of hydrophytic vegetation and
-	Mucky Mineral (S1)		Vernal Poo	ls (F9)				hydrology must be present,
-	Gleyed Matrix (S4)						unless o	disturbed or problematic.
	Layer (if present):							
· · ·			-					
Depth (in	ches):		_				Hydric Soil	I Present? Yes No <u>√</u>
HYDROLO	oGY							
Wetland Hy	drology Indicators:							
Primary India	cators (minimum of c	ne required; ch	eck all that app	ly)			Seco	ndary Indicators (2 or more required)
Surface	Water (A1)		Salt Crust	t (B11)			V	Vater Marks (B1) (Riverine)
	ater Table (A2)		Biotic Cru	` ,				Sediment Deposits (B2) (Riverine)
Saturati			Aquatic Ir		s (B13)			Orift Deposits (B3) (Riverine)
	narks (B1) (Nonriver	ine)	Hydrogen					Orainage Patterns (B10)
	nt Deposits (B2) (No	,				Living Roo		Ory-Season Water Table (C2)
	posits (B3) (Nonrive		Presence	•	_	-		Crayfish Burrows (C8)
	Soil Cracks (B6)	•	Recent Ire					Saturation Visible on Aerial Imagery (C
	on Visible on Aerial	magery (B7)	Thin Mucl			•		Shallow Aquitard (D3)
·	Stained Leaves (B9)		Other (Ex	plain in Re	marks)			FAC-Neutral Test (D5)
Field Obser	vations:		· ·	·				· ,
Surface Wat	ter Present? Y	es No	✓ Depth (in	nches):				
Water Table			✓ Depth (ir					
Saturation P			✓ Depth (ir				and Hydrolog	y Present? Yes ✓ No
	pillary fringe)	es No_	Deptii (ii	ici ies)		_ ""	and riyarolog	y resent: res_v No
	corded Data (stream	gauge, monito	ring well, aerial	photos, pr	evious ins	pections),	if available:	
Remarks:								
Surface s	oil cracks are li	kelv relictu:	al from whe	n this a	rea wa	s nrevio	usly inund	ated
Ja. 1466 3	on or dono di e ili	, renetat		ci ii 5 u		- p. c v 10		

Project/Site: Morton Bay Geothermal Project	City/County: Imperial	County	Sampling Date: 3/12/22
Applicant/Owner: Morton Bay Geothermal LLC		State: CA	Sampling Point: S-21
Investigator(s): R. Newton, M. King	Section, Township, Ra	inge: <u>S24 T11S R13E</u>	
Landform (hillslope, terrace, etc.): <u>excavated pond</u>	Local relief (concave,	convex, none): concave	Slope (%): <u>0-3</u>
Subregion (LRR): <u>D - Interior Deserts</u>			
		-	
Are climatic / hydrologic conditions on the site typical for			
Are Vegetation, Soil, or Hydrology	·		oresent? Yes <u>√</u> No
Are Vegetation, Soil, or Hydrology		eeded, explain any answe	
		-	
SUMMARY OF FINDINGS – Attach site ma	ap snowing sampling point i	ocations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes	No <u>√</u> Is the Sample	d Area	
	No within a Wotlan		No <u>√</u>
	No		
Remarks:			
NWI-mapped semipermanently flooded p		, •	9
Antecedent Precipitation Tool determine	ed the area was drier than no	ormal at the time of	r sampling.
VEGETATION – Use scientific names of pl			
Tree Stratum (Plot size:)	Absolute Dominant Indicator W Cover Species? Status	Dominance Test work	
1		Number of Dominant S	pecies or FAC:0 (A)
2			
3.		Total Number of Domin Species Across All Stra	
4			
	= Total Cover	Percent of Dominant Sport That Are OBL, FACW,	or FAC: 0 (A/B)
Sapling/Shrub Stratum (Plot size: 15' radius)		Prevalence Index wor	kshoot:
1. <u>.</u>			Multiply by:
2			x 1 =
4			x 2 =
5.			x 3 =
	0 = Total Cover	FACU species	x 4 =
Herb Stratum (Plot size: 5' radius)		UPL species	x 5 =
1		Column Totals:	(A) (B)
2		Prevalence Index	= B/A =0
3 4		Hydrophytic Vegetation	
5		Dominance Test is	
6		Prevalence Index i	
7.			ptations ¹ (Provide supporting
8			s or on a separate sheet)
W 1.15 01 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	e Total Cover	Problematic Hydro	phytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size:)		¹ Indicators of hydric so	il and wetland hydrology must
1 2		be present, unless distr	
£	= Total Cover	Hydrophytic	
% Bare Ground in Herb Stratum 100 % Co	over of Biotic Crust0	Vegetation	a Na /
% Bare Ground in Herb Stratum 100 % Co	over of Biotic Crust	Present? Ye	s No_ <u>√</u> _
No vegetation rooted in the pond.			
İ			

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion And Reduced Reduce	Depth	Matrix	<		Redo	x Features	3			
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Soil (A9)	(inches)			Colo				Loc ²	Texture	Remarks
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Soil (A9)										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Soil (A9)										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Soil (A9)										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Soil (A9)										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Soil (A9)										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Soil (A9)										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Soil (A9)										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Soil (A9)						- —				
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Soil (A9)										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Soil (A9)										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Soil (A9)	¹ Type: C=Ce	oncentration, D=E	epletion, RI	M=Reduce	ed Matrix, C	S=Covered	d or Coate	d Sand Gr	rains. ² Loca	ition: PL=Pore Lining, M=Matrix.
Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Material (TF2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) 2 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Depth (inches): Depth (inches): Depth (inches): Soils not investigated. Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Surface Water (A1) Water Marks (B1) (Riverine) Water Marks (B1) (Riverine) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drift Deposits (B2) (Nonriverine) Drift Deposits (B2) (Nonriverine) Drift Deposits (B2) (Nonriverine) Presence of Reduced from (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C7) Shallow Aquitard (D3) Water Table Leves (B9) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Settleration Present? Yes No Depth (inches): Settlerations, if available:										
Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Material (TF2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Depleted Below Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Depth (inches): Depth (inches): Depth (inches): Soils not investigated. Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required): Hydric Soil Present? Yes No Remarks: Soils not investigated. Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Derift Deposits (B2) (Nonriverine) Derift Deposits (B3) (Nonriverine) Derift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Surface Water Present? Yes No Depth (inches): Surface Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Histosol	(A1)			Sandy Red	ox (S5)			1 cm Mı	uck (A9) (LRR C)
Black Histic (A3)		` '								
Hydrogen Sulfide (A4)							l (F1)			
Stratified Layers (A5 (LRR C) Depleted Matrix (F3)		` '			•	-	. ,			` ,
1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A12) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No			(RC)				` ,			, ,
Depleted Below Dark Surface (A11)			,		•	` '	F6)		_ `	,
Thick Dark Surface (A12)			face (A11)							
Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type:	Thick Da	ark Surface (A12)	, ,						³ Indicators o	f hydrophytic vegetation and
Restrictive Layer (if present): Type: Depth (inches): Depth (inches): No Remarks: Soils not investigated. Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Surface Water (A1) Salt Crust (B11) Sediment Deposits (B2) (Riverine) Saturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B3) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Sediment Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Seturation Visible on Present? Yes No Depth (inches): Seturation Present? Yes No Presence on the present Present? Yes No	Sandy M	Mucky Mineral (S1)		Vernal Poo	s (F9)			wetland h	ydrology must be present,
Type:	Sandy G	Sleyed Matrix (S4))						unless dis	turbed or problematic.
Depth (inches):	Restrictive I	Layer (if present):							
Name	Type:									
Name	Depth (in	ches):							Hydric Soil F	Present? Yes No
Soils not investigated. Soils not invest									,	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) ✓ Surface Water (A1) — High Water Table (A2) — Salt Crust (B12) — Sediment Deposits (B2) (Riverine) — Water Marks (B1) (Riverine) — Sediment Deposits (B3) (Riverine) — Water Marks (B1) (Nonriverine) — Sediment Deposits (B3) (Riverine) — Drainage Patterns (B10) — Sediment Deposits (B3) (Nonriverine) — Sediment Deposits (B3) (Riverine) — Drainage Patterns (B10) — Sediment Deposits (B3) (Riverine) — Drainage Patterns (B10) — Drainage Patterns (B										
Primary Indicators (minimum of one required; check all that apply) ✓ Surface Water (A1)										
✓ Surface Water (A1)	Wetland Hy	drology Indicato	rs:							
High Water Table (A2)	Primary Indic	cators (minimum o	of one requir	ed; check	all that appl	y)			Second	lary Indicators (2 or more required)
	✓ Surface	Water (A1)			_ Salt Crust	(B11)			Wa	ater Marks (B1) (Riverine)
	High Wa	ater Table (A2)			Biotic Crus	st (B12)			Se	diment Deposits (B2) (Riverine)
Water Marks (B1) (Nonriverine)							s (B13)			
Sediment Deposits (B2) (Nonriverine)		` ,	verine)				, ,			
Drift Deposits (B3) (Nonriverine)								Livina Roo		-
Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C1 Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Shallow Aquitard (D3) Factorial Test (D5) Field Observations: Surface Water Present? Yes ✓ No Depth (inches): ~2 feet Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes ✓ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					 '		-	_		• • •
Inundation Visible on Aerial Imagery (B7)			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		 '				· 	
Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		` ,	al Imagory (u 00113 (00		
Field Observations: Surface Water Present? Yes ✓ No Depth (inches): ~2 feet Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes ✓ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Inundati	OII VISIDIE OII AEII		<i></i>	_	•	,			' ' '
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches):		tained Lagues (D	9)	_	_ Other (Ex	olain in Re	marks)		FA	C-Neutral Test (D5)
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes✓ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water-S	-	- /			_				
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes ✓ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water-S	vations:	<u> </u>			ches): ~2	teet			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water-S	vations:	Yes <u></u> ✓			,				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water-S Field Obser Surface Wat	vations: er Present?	Yes <u></u> ✓			,		<u> </u>		
	Water-S Field Obser Surface Water Water Table Saturation P	vations: er Present? Present? resent?	Yes✓ Yes	No	Depth (in	ches):			and Hydrology	Present? Yes <u>√</u> No
Remarks:	Water-S Field Obser Surface Wate Water Table Saturation P (includes cap	vations: er Present? Present? resent? present? pillary fringe)	Yes Yes	No	Depth (in Depth (in	ches):		Wetla		Present? Yes <u>√</u> No
Remarks:	Water-S Field Obser Surface Wate Water Table Saturation P (includes cap	vations: er Present? Present? resent? present? pillary fringe)	Yes Yes	No	Depth (in Depth (in	ches):		Wetla		Present? Yes <u>√</u> No
	Water-S Field Obser Surface Wate Water Table Saturation P (includes cap	vations: er Present? Present? resent? present? pillary fringe)	Yes Yes	No	Depth (in Depth (in	ches):		Wetla		Present? Yes <u>√</u> No
	Water-S Field Obser Surface Wate Water Table Saturation P (includes cap	vations: er Present? Present? resent? present? pillary fringe)	Yes Yes	No	Depth (in Depth (in	ches):		Wetla		Present? Yes <u>√</u> No
	Water-S Field Obser Surface Water Table Saturation P (includes cap Describe Re	vations: er Present? Present? resent? present? pillary fringe)	Yes Yes	No	Depth (in Depth (in	ches):		Wetla		Present? Yes <u>√</u> No
	Water-S Field Obser Surface Water Table Saturation P (includes cap Describe Re	vations: er Present? Present? resent? present? pillary fringe)	Yes Yes	No	Depth (in Depth (in	ches):		Wetla		Present? Yes <u>√</u> No
	Water-S Field Obser Surface Water Table Saturation P (includes cap Describe Re	vations: er Present? Present? resent? present? pillary fringe)	Yes Yes	No	Depth (in Depth (in	ches):		Wetla		Present? Yes <u>√</u> No

Project/Site: Morton Bay Geothermal Project	(City/Cour	nty: <u>Imperial</u>	County		Sampling Date:	3/12/22	
Applicant/Owner: Morton Bay Geothermal LLC								
Investigator(s): R. Newton, M. King	;	Section,	Township, Rai	nge: <u>S19 T11S 1</u>	.4E			
Landform (hillslope, terrace, etc.): shallow excavation		Local rel	ief (concave, o	convex, none): <u>n</u>	one	Slo	ope (%): 0	
Subregion (LRR): D - Interior Deserts	Lat: 33.	198116		Long: -115.56	0882	Datu	um: WGS 84	
Soil Map Unit Name: Imperial silty clay, wet				NWI	classifica	tion: PUSCx		
Are climatic / hydrologic conditions on the site typical for this								
Are Vegetation, Soil, or Hydrology si	-			Normal Circumst			√ No	
Are Vegetation, Soil, or Hydrology na				eded, explain an				
SUMMARY OF FINDINGS – Attach site map s							eatures, etc.	
Hydrophytic Vegetation Present? Yes ✓ No				·			· · · · · · · · · · · · · · · · · · ·	
Hydric Soil Present? Yes No			the Sampled			/		
Wetland Hydrology Present? Yes ✓ No		Wi	ithin a Wetlar	nd? Yo	es	No <u>√</u> _	_	
Remarks:								
Area mapped by NWI as a seasonally flooded excavated p								
hunting and lacks hydric soil indicators. The Antecedent F	Precipitation	on Tool d	etermined th	e area was drier	than norr	nal at the time	of sampling.	
VEGETATION – Use scientific names of plant	·e							
VEGETATION - 030 301011.1110 Harries of plant		Domina	nt Indicator	Dominance Te	et worke	heet:		
Tree Stratum (Plot size:)			Status	Number of Don				
1				That Are OBL,	FACW, or	FAC:	1 (A)	
2				Total Number of	of Domina			
3				Species Across	All Strata	a:	<u>2</u> (B)	
4				Percent of Dom			_	
Sapling/Shrub Stratum (Plot size:)	-	= rotar (Jover	That Are OBL,	FACW, or	FAC: <u>5</u>	60 (A/B)	
1				Prevalence Inc	lex works	sheet:		
2				Total % Co	ver of:	Multip	ly by:	
3				OBL species				
4				FACW species				
5				FAC species				
Herb Stratum (Plot size: 5' radius)		= Total (Cover	FACU species UPL species				
1. Rumex fueginus	20	Y	FACW_	Column Totals:				
2. Melilotus indicus		Υ		Column Totals.		(^)	<u>07</u> (B)	
3. Portulaca oleracea	5	N	<u>FAC</u> _			= B/A =	2.6	
4				Hydrophytic V	-			
5				Dominance				
6				✓ Prevalence		≤3.0 [·] :ations¹ (Provide		
7						or on a separate		
8				Problemati	c Hydroph	nytic Vegetation	¹ (Explain)	
Woody Vine Stratum (Plot size:)		= Total (Jover					
1						and wetland hyd		
2				be present, unit	ess distur	bed or problema	ATIC.	
		= Total (Cover	Hydrophytic Vegetation				
% Bare Ground in Herb Stratum67	of Biotic Cı	rust	0	Present?	Yes	No		
Remarks:				<u> </u>				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature %	es Type ¹	Loc ²	Toyturo	Remarks
								Remarks
0 - 4	7.5 YR 4/3	<u>95</u>	7.5 YR 4/2	5	_ <u>C</u>	_ <u>M</u>	SiCl	·
4 - 18	7.5 YR 4/3	100					SiCl	
					_			
							<u> </u>	· · · · · · · · · · · · · · · · · · ·
							<u> </u>	·
¹ Type: C=C	oncentration, D=De	pletion, RM	=Reduced Matrix, CS	S=Covere	ed or Coat	ed Sand G	Grains. ² Lo	ocation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appli	cable to all	LRRs, unless other	wise no	ted.)		Indicators	s for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Redo	ox (S5)			1 cm	Muck (A9) (LRR C)
Histic E	pipedon (A2)		Stripped Ma	atrix (S6)			2 cm	Muck (A10) (LRR B)
	istic (A3)		Loamy Muc	-				ced Vertic (F18)
	en Sulfide (A4)	•	Loamy Gley					Parent Material (TF2)
	d Layers (A5) (LRR	C)	Depleted M	` '			Other	(Explain in Remarks)
	uck (A9) (LRR D) d Below Dark Surfa	re (Δ11)	Redox Dark Depleted Dark					
	ark Surface (A12)	CC (A11)	Redox Dep		, ,		3Indicators	s of hydrophytic vegetation and
	Aucky Mineral (S1)		Vernal Pool		()			I hydrology must be present,
Sandy G	Bleyed Matrix (S4)			, ,			unless	disturbed or problematic.
Restrictive	Layer (if present):							
Type:								
Depth (in	ches):						Hydric Soi	I Present? Yes No _√_
HYDROLO	GY							
	drology Indicators							
_			d; check all that appl	v)			Seco	andary Indicators (2 or more required)
✓ Surface		one require	Salt Crust					Water Marks (B1) (Riverine)
	ater Table (A2)		Biotic Crus	. ,			· · · · · · · · · · · · · · · · · · ·	Sediment Deposits (B2) (Riverine)
Saturation			Aquatic In		es (B13)			Orift Deposits (B3) (Riverine)
	larks (B1) (Nonrive	rine)	Hydrogen		, ,			Drainage Patterns (B10)
	nt Deposits (B2) (No	•				Living Ro		Ory-Season Water Table (C2)
	posits (B3) (Nonrive		Presence		_	_		Crayfish Burrows (C8)
✓ Surface	Soil Cracks (B6)	,	Recent Iro					Saturation Visible on Aerial Imagery (C9)
	on Visible on Aerial	Imagery (B				,		Shallow Aquitard (D3)
Water-S	tained Leaves (B9)		Other (Exp	olain in R	emarks)		<u> </u>	FAC-Neutral Test (D5)
Field Obser	vations:							
Surface Wat	er Present?	Yes <u>√</u>	No Depth (in	ches): <u>2</u>				
Water Table	Present?	Yes	No <u>√</u> Depth (in	ches):				
Saturation P (includes car		Yes	No <u>✓</u> Depth (in	ches):		Wet	tland Hydrolog	gy Present? Yes <u>√</u> No
		n gauge, m	onitoring well, aerial	ohotos, p	revious in	spections)	, if available:	
Remarks:								
Surface w waterfow	_	ent earli	er during the do	elineat	ion. Th	e area a	ppears to	be irrgated over the winter for

Project/Site: Morton Bay Geothermal Project	City	//County: Imperia	l County	Sar	mpling Date: _	3/12/22		
Applicant/Owner: Morton Bay Geothermal LLC			State: <u>CA</u> Sampling Point: <u>S-23</u>					
Investigator(s): R. Newton, M. King	Sec	ction, Township, Ra	ange: <u>\$19 T11\$ R</u>	14E				
Landform (hillslope, terrace, etc.): shallow excavation	<u>1</u> Lo	cal relief (concave,	convex, none): no	ne	Slop	oe (%): 0		
Subregion (LRR): D - Interior Deserts	Lat: 33.19	5251	_ Long: <u>-115.56</u> 2	2361	Datur	n: WGS 84		
Soil Map Unit Name: Imperial silty clay, wet			NWI	classification	n: PUSCx			
Are climatic / hydrologic conditions on the site typical for			_					
Are Vegetation, Soil, or Hydrology	-		"Normal Circumsta			' No		
Are Vegetation, Soil, or Hydrology			eeded, explain any					
SUMMARY OF FINDINGS – Attach site ma					•	atures, etc.		
	· · ·		<u> </u>	·	<u> </u>			
	No <u>√</u> No <u>√</u>	Is the Sample						
	No	within a Wetla	nd? Ye	s	No <u>√</u>	ı		
Remarks:		l						
Area mapped by NWI as a seasonally flooded excava								
hunting and lacks hydric soil indicators. The Anteced	ent Precipitation	fool determined th	ne area was drier t	han norma	l at the time o	of sampling.		
VEGETATION – Use scientific names of pl	lants.							
		ominant Indicator	Dominance Te	st workshe	et:			
Tree Stratum (Plot size:)		pecies? Status	Number of Dom	inant Specie	es			
1			That Are OBL, F	-ACW, or FA	AC: <u>1</u>	(A)		
2			Total Number of		2	(D)		
3 4			Species Across	All Strata:		(B)		
	=		Percent of Dom That Are OBL, F) (A/R)		
Sapling/Shrub Stratum (Plot size:)						<u>) (A/B)</u>		
1			Prevalence Ind					
2					Multiply			
3			OBL species					
4			FACW species FAC species					
5	=		FACU species					
Herb Stratum (Plot size: 5' radius)		Total Gover	UPL species					
1. Phalaris canariensis			Column Totals:			64 (B)		
2. Rumex fueginus					2	2		
3			Hydrophytic Vo		/A = <u>3.</u>	.2		
4			Dominance	•				
5			Prevalence					
6					ons ¹ (Provide	supporting		
7 8			data in F	Remarks or o	on a separate	sheet)		
0		Total Cover	Problemation	Hydrophyti	c Vegetation ¹	(Explain)		
Woody Vine Stratum (Plot size:)		. 0.0.						
1			¹ Indicators of hy					
2			• •	.oo alotalbet	a or problemat			
	=	Total Cover	Hydrophytic Vegetation					
% Bare Ground in Herb Stratum80	over of Biotic Crus	t <u> </u>	Present?	Yes	No	<u> </u>		
Remarks:			•					

Profile Desc	ription: (Describe	to the de	oth needed to docu	ment the i	ndicator	or confirm	n the absence of indica	itors.)
Depth	Matrix			x Feature		. 2		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
<u>0 - 5</u>	7.5 YR 4/3	<u>95</u>	7.5 YR 4/2	5	<u>C</u>	_ <u>M</u>	SiCl	
5 - 18	7.5 YR 4/3	100					SiCl	
								·
				-				
	_							
			=Reduced Matrix, C			ed Sand Gr		L=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applic	able to al	I LRRs, unless othe	rwise not	ed.)		Indicators for Prob	lematic Hydric Soils ³ :
Histosol			Sandy Red				1 cm Muck (A9)	
	pipedon (A2)		Stripped Ma	` ,			2 cm Muck (A10	
Black His			Loamy Muc	-			Reduced Vertic	
	n Sulfide (A4) I Layers (A5) (LRR (C)	Loamy Gley Depleted M		(FZ)		Red Parent Mat Other (Explain in	
	ck (A9) (LRR D)	C)	Redox Darl	. ,	'F6)		Other (Explain i	i Kellaiks)
	Below Dark Surfac	e (A11)	Depleted D		,			
	rk Surface (A12)	- ()	Redox Dep				³ Indicators of hydrop	phytic vegetation and
Sandy M	ucky Mineral (S1)		Vernal Poo	ls (F9)			wetland hydrology	/ must be present,
	leyed Matrix (S4)						unless disturbed of	or problematic.
Restrictive L	ayer (if present):							
Type:								
Depth (inc	ches):						Hydric Soil Present	? Yes No_ <u>√</u>
Remarks:								
HYDROLO	GY							
Wetland Hyd	Irology Indicators:							
=			ed; check all that appl	v)			Secondary Indi	cators (2 or more required)
✓ Surface \			Salt Crust					ks (B1) (Riverine)
	ter Table (A2)		Biotic Cru	` '				Deposits (B2) (Riverine)
Saturatio			Aquatic In		s (B13)			sits (B3) (Riverine)
	arks (B1) (Nonrive r	ine)	Hydrogen				Drainage F	
	it Deposits (B2) (No					Livina Roc	ots (C3) Dry-Seaso	` '
	osits (B3) (Nonrive		Presence		-	•	Crayfish B	` '
	Soil Cracks (B6)	,				ed Soils (C6	 ·	Visible on Aerial Imagery (C9)
	on Visible on Aerial	Imagery (E				`	Shallow Ac	
· · · · · · · · · · · · · · · · · · ·	tained Leaves (B9)	3 , \	Other (Ex				FAC-Neutr	
Field Observ				'				
Surface Water	er Present? Y	′es ✓	No Depth (in	ches): 2				
Water Table			No ✓ Depth (in			l l		
Saturation Pr			No ✓ Depth (in				and Hydrology Presen	t? Yes <u>√</u> No
(includes cap	illary fringe)							
Describe Rec	corded Data (stream	n gauge, m	onitoring well, aerial	photos, pr	evious in:	spections),	if available:	
Remarks:								

Project/Site: Morton Bay Geothermal Project	(City/Coun	ty: <u>Imperial</u>	County		Sampling Date: _	3/12/22
Applicant/Owner: Morton Bay Geothermal LLC				State:	CA S	Sampling Point:	S-24
Investigator(s): R. Newton, M. King	;	Section, T	ownship, Ra	nge: <u>S19 T11S F</u>	R14E		
Landform (hillslope, terrace, etc.): shallow excavation		Local reli	ef (concave,	convex, none): n	one	Slo	pe (%): <u>0</u>
Subregion (LRR): D - Interior Deserts							
Soil Map Unit Name: Imperial silty clay, wet							
Are climatic / hydrologic conditions on the site typical for the				_			
Are Vegetation, Soil, or Hydrology	-			"Normal Circumst			/ No
Are Vegetation, Soil, or Hydrology				eeded, explain an	•		
							_4
SUMMARY OF FINDINGS – Attach site map	snowing	Sampii	ng point i	ocations, trai	isects,	important re	atures, etc.
Hydrophytic Vegetation Present? Yes	No <u>√</u>	Is	the Sampled	l Area			
Hydric Soil Present? Yes			thin a Wetlaı		es	No <u></u> ✓	_
Wetland Hydrology Present? Yes <u>✓</u>	No						
Remarks:	d d d le	NILID					
Area mapped by NWI as a seasonally flooded excavate hunting and lacks hydric soil indicators. The Anteceder							
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
VEGETATION – Use scientific names of pla	nts.						
Trop Stratum (Diot piza:			nt Indicator	Dominance Te			
Tree Stratum (Plot size:)			? Status	Number of Don That Are OBL,			(A)
1 2							(A)
3				Total Number of Species Across		nt v 3	B (B)
4.							(=)
				Percent of Dom That Are OBL,			3 (A/B)
Sapling/Shrub Stratum (Plot size: 15' radius)	10		= 4.00				
1. Atriplex lentiformis				Prevalence Inc		sneet: Multipl	v bv:
2						x 1 =	
3						x 2 =	
5						x 3 =	
			Cover			x 4 =	
Herb Stratum (Plot size: 5' radius)				UPL species		x 5 =	
1. Melilotus indicus		<u>Y</u>	_ FACU	Column Totals:	32	(A)	116 (B)
2. Rumex obtusifolius				Prevalend	re Indev =	= B/A =3	6
3				Hydrophytic V			
4 5				Dominance	_		
6				Prevalence			
7				Morpholog	ical Adapt	ations ¹ (Provide	
8.						or on a separate	•
		= Total C		Problemati	c Hydropn	nytic Vegetation ¹	(Explain)
Woody Vine Stratum (Plot size:)				¹ Indicators of h	vdric soil :	and wetland hyd	rology must
1						ped or problema	
2		= Total C		Hydrophytic			
70		•		Vegetation	.,		,
% Bare Ground in Herb Stratum	er of Biotic Ci	ust	0	Present?	Yes	No	<u> </u>
Remarks:							

		%	Color (moist)	ox Feature %	Type ¹	Loc ²	Texture	Remarks
	Color (moist) 7.5 YR 4/3	95	7.5 YR 4.2			M	SiCl	Nemarks
						IVI		
4 - 18	7.5 YR 4/3	100					SiCl	
			· -				-	
		_		_				
				_				
								
			4-Dadwaad Matrix C	C-Causas				action. DI -Dona Lining M-Matrix
			I=Reduced Matrix, Control I LRRs, unless other			ed Sand G		cation: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Histosol (cable to al	Sandy Red		ou.,			Muck (A9) (LRR C)
	ipedon (A2)		Stripped M	. ,				Muck (A10) (LRR B)
Black His			Loamy Mud		ıl (F1)			ced Vertic (F18)
	n Sulfide (A4)		Loamy Gle	-	. ,			arent Material (TF2)
	Layers (A5) (LRR	C)	Depleted M	-	` '			(Explain in Remarks)
	ck (A9) (LRR D)		Redox Dar	. ,	(F6)			-
Depleted	Below Dark Surface	ce (A11)	Depleted D	ark Surfac	ce (F7)			
	rk Surface (A12)		Redox Dep		F8)			of hydrophytic vegetation and
	ucky Mineral (S1)		Vernal Poo	ls (F9)				hydrology must be present,
	leyed Matrix (S4)						unless d	listurbed or problematic.
_	.ayer (if present):							
•• —								D 40 V
Depth (inc	:hes):						Hydric Soil	Present? Yes No <u>√</u>
	2V							
YDROLOG								
YDROLOG	Irology Indicators		ad: check all that ann	lv)			Secon	ndary Indicators (2 or more required)
YDROLOG Wetland Hyd Primary Indica	Irology Indicators ators (minimum of		ed; check all that app					ndary Indicators (2 or more required)
YDROLOG Wetland Hyd Primary Indica	Irology Indicators ators (minimum of Water (A1)		Salt Crust	t (B11)			v	Vater Marks (B1) (Riverine)
YDROLOG Wetland Hyd Primary Indica Surface N	Irology Indicators ators (minimum of Water (A1) ter Table (A2)		Salt Crust	t (B11) st (B12)	ne (P12)		v s	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
YDROLOG Wetland Hyd Primary Indica Surface N High Wat	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3)	one require	Salt Crust Biotic Cru Aquatic In	t (B11) st (B12) overtebrate	. ,		v s d	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine)
YDROLOG Wetland Hyd Primary Indica Surface North Wat High Wat Saturatio Water Ma	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive	one require	Salt Crust Biotic Cru Aquatic In Hydrogen	t (B11) ist (B12) ivertebrate Sulfide O	dor (C1)	Living Po	v s d	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10)
Primary Indication Surface Notes High Wates Saturation Water Mates Sedimen	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive t Deposits (B2) (No	one require rine) onriverine	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized	t (B11) est (B12) evertebrate Sulfide O Rhizosphe	dor (C1) eres along	_	V S D ots (C3) D	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2)
Wetland Hyd Primary Indica Surface V High Wat Saturatio Water Ma Sedimen Drift Dep	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive t Deposits (B2) (No	one require rine) onriverine	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized	t (B11) ust (B12) uvertebrate u Sulfide O Rhizosphe of Reduce	dor (C1) eres along ed Iron (C	4)	V S C C ots (C3) C	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Orayfish Burrows (C8)
Wetland Hyd Primary Indica Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Surface S	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6)	one require rine) onriverine; erine)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Iro	t (B11) ust (B12) uvertebrate u Sulfide O Rhizosphe of Reduce on Reducti	dor (C1) eres along ed Iron (C ion in Tille	4)	V S C C C C C	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Originage Patterns (B10) Ory-Season Water Table (C2) Orayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS
YDROLOG Wetland Hyd Primary Indica Surface V High Wat Saturatio Water Ma Sedimen Drift Dep V Surface S Inundatio	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6) in Visible on Aerial	one require rine) porriverine; erine)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Iro Thin Mucl	t (B11) ust (B12) uvertebrate u Sulfide O Rhizosphe of Reduce on Reducti k Surface	dor (C1) eres along ed Iron (C ion in Tille (C7)	4)	V S C C C C C C S S	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Originage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
YDROLOG Wetland Hyd Primary Indica Surface N High Wat Saturatio Water Ma Sedimen Drift Dep ✓ Surface S Inundatio Water-St	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6) in Visible on Aerial ained Leaves (B9)	one require rine) porriverine; erine)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Iro Thin Mucl	t (B11) ust (B12) uvertebrate u Sulfide O Rhizosphe of Reduce on Reducti	dor (C1) eres along ed Iron (C ion in Tille (C7)	4)	V S C C C C C C S S	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Originage Patterns (B10) Ory-Season Water Table (C2) Orayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS
YDROLOG Wetland Hyd Primary Indica Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6) on Visible on Aerial ained Leaves (B9) vations:	one require rine) onriverine; erine)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized In Presence Recent Iro Thin Mucl Other (Ex	t (B11) ust (B12) nvertebrate Sulfide O Rhizosphe of Reduce on Reducti k Surface o	dor (C1) eres along ed Iron (C ion in Tille (C7) emarks)	4) d Soils (Co	V S C C C C C C S S	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Originage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Wetland Hyd Primary Indica Surface V High Wat Saturatio Water Ma Sedimen Drift Dep V Surface S Inundatio Water-St Field Observ	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6) in Visible on Aerial ained Leaves (B9) vations: er Present?	one require rine) onriverine erine) Imagery (E	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Thin Mucl Other (Ex	t (B11) ust (B12) nvertebrate Sulfide O Rhizosphe of Reduce on Reducti k Surface (plain in Re	dor (C1) eres along ed Iron (C eron in Tille (C7) emarks)	4) d Soils (Ce	V S C C C C C C S S	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Originage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
YDROLOG Wetland Hyd Primary Indica Surface N High Wat Saturatio Water Ma Sedimen Drift Dep ✓ Surface S Inundatio Water-St Field Observ Surface Water	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6) in Visible on Aerial ained Leaves (B9) rations: er Present?	rine) prine) prine) prine) Imagery (E	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Thin Mucl Other (Ex	t (B11) list (B12) nvertebrate li Sulfide O Rhizosphe of Reduce on Reducti k Surface (plain in Re nches):	dor (C1) eres along ed Iron (C fon in Tille (C7) emarks)	4) d Soils (Co	V C C C C C S S	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) EAC-Neutral Test (D5)
YDROLOG Wetland Hyd Primary Indica Surface \ High Wat Saturatio Water Ma Sedimen Drift Dep ✓ Surface S Inundatio Water-St Field Observ Surface Water Water Table If Saturation Pro	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6) in Visible on Aerial ained Leaves (B9) vations: er Present? Present?	rine) prine) prine) prine) Imagery (E	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Thin Mucl Other (Ex	t (B11) list (B12) nvertebrate li Sulfide O Rhizosphe of Reduce on Reducti k Surface (plain in Re nches):	dor (C1) eres along ed Iron (C fon in Tille (C7) emarks)	4) d Soils (Co	V C C C C C S S	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Originage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Wetland Hyd Primary Indica Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water Water Table If Saturation Pro (includes cap	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6) in Visible on Aerial ained Leaves (B9) vations: er Present? Present? esent? illary fringe)	rine) ponriverine) Imagery (E	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Thin Mucl Other (Ex	t (B11) list (B12) livertebrate li Sulfide O Rhizosphe of Reduce on Reducti k Surface (liplain in Re linches): linc	dor (C1) eres along ed Iron (C on in Tille (C7) emarks)	4) d Soils (Co	V S C ots (C3) C C 6) S S	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) EAC-Neutral Test (D5)
Wetland Hyde Primary Indica Surface N High Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water Water Table If Saturation Pro (includes cap Describe Rec	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6) in Visible on Aerial ained Leaves (B9) vations: er Present? Present? esent? illary fringe)	rine) ponriverine) Imagery (E	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Thin Mucl Other (Ex No V Depth (in No V Depth (in	t (B11) list (B12) livertebrate li Sulfide O Rhizosphe of Reduce on Reducti k Surface (liplain in Re linches): linc	dor (C1) eres along ed Iron (C on in Tille (C7) emarks)	4) d Soils (Co	V S C ots (C3) C C 6) S S	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) EAC-Neutral Test (D5)
Wetland Hyd Primary Indica Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water Water Table If Saturation Pro (includes cap	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6) in Visible on Aerial ained Leaves (B9) vations: er Present? Present? esent? illary fringe)	rine) ponriverine) Imagery (E	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Thin Mucl Other (Ex No V Depth (in No V Depth (in	t (B11) list (B12) livertebrate li Sulfide O Rhizosphe of Reduce on Reducti k Surface (liplain in Re linches): linc	dor (C1) eres along ed Iron (C on in Tille (C7) emarks)	4) d Soils (Co	V S C ots (C3) C C 6) S S	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) EAC-Neutral Test (D5)
Wetland Hyde Primary Indica Surface N High Water Ma Sedimen Drift Dep Surface S Inundatio Water-St Field Observ Surface Water Water Table If Saturation Pro (includes cap Describe Rec	Irology Indicators ators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrive t Deposits (B2) (No osits (B3) (Nonrive Soil Cracks (B6) in Visible on Aerial ained Leaves (B9) vations: er Present? Present? esent? illary fringe)	rine) ponriverine) Imagery (E	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Thin Mucl Other (Ex No V Depth (in No V Depth (in	t (B11) list (B12) livertebrate li Sulfide O Rhizosphe of Reduce on Reducti k Surface (liplain in Re linches): linc	dor (C1) eres along ed Iron (C on in Tille (C7) emarks)	4) d Soils (Co	V S C ots (C3) C C 6) S S	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) EAC-Neutral Test (D5)

Project/Site: Morton Bay Geothermal Project	City/0	County: Imperial	County	Sampling Date: 3/1	12/22
Applicant/Owner: Morton Bay Geothermal LLC			State: CA	Sampling Point: S	-25
Investigator(s): R. Newton, M. King	Secti	on, Township, Rar	nge: <u>S23 T11S R13E</u>		
Landform (hillslope, terrace, etc.): shallow excavation	Loca	al relief (concave, c	convex, none): none	Slope (%)	: <u>0</u>
Subregion (LRR): D - Interior Deserts	Lat: 33.2023	311	Long: -115.588074	Datum: W(GS 84
			-	cation: L2UBFx/L2USCx	
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology _ ✓ _ sig	-				lo
Are Vegetation, Soil, or Hydrology na			eded, explain any answe		
SUMMARY OF FINDINGS – Attach site map s			•	,	s, etc.
Hydrophytic Vegetation Present? Yes✓ No					
Hydric Soil Present? Yes ✓ No		Is the Sampled			
Wetland Hydrology Present? Yes No		within a Wetlan	id? Yes	No <u>√</u>	
Remarks:		1			
Area mapped by NWI as excavated lakes. Construction of the O-N required on the part of Imperial Irrigation District (see EPA Docke normal at the time of sampling.		, ,	•		0
VEGETATION – Use scientific names of plants	 S.				
		minant Indicator	Dominance Test work	sheet:	
		ecies? Status	Number of Dominant S		
1			That Are OBL, FACW,	or FAC: 1	(A)
2			Total Number of Domir		(D)
3			Species Across All Stra	ata: <u>1</u>	(B)
	= To		Percent of Dominant S	pecies or FAC: <u>100</u>	(A/R)
Sapling/Shrub Stratum (Plot size: 15' radius)				·	(A/D)
1. Allenrolfea occidentalis			Prevalence Index wor		
2				Multiply by:	
3			•	x1 =	
4				x 2 = 90 x 3 =	
5	= To	otal Cover		x 4 =	
Herb Stratum (Plot size: 5' radius)	 - 10	otal Govel	UPL species		_
1			Column Totals: 4		(B)
2				2.0	
3				x = B/A = 2.0	
4			Hydrophytic Vegetation ✓ Dominance Test is		
5			✓ Prevalence Index i		
6				ptations ¹ (Provide suppo	rtina
7. 8.				s or on a separate sheet)	
·	0 = To	otal Cover	Problematic Hydro	phytic Vegetation ¹ (Expla	ıin)
Woody Vine Stratum (Plot size:)		, a. 6616.			
1			¹ Indicators of hydric so be present, unless dist	il and wetland hydrology	must
2			·	and or problematic.	
	= To	otal Cover	Hydrophytic Vegetation		
% Bare Ground in Herb Stratum 100 % Cover of	of Biotic Crust _	0	Present? Ye	es <u>√</u> No	
Remarks:					
Dead Typha domingensis					

Depth	Matrix			ox Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0 - 18	2.5 y 6/2	75	2.5 YR 3/4	25	<u></u>		Sa	
		_						
			-		-			
				_	_			
				_	_			
							. 21	
			M=Reduced Matrix, Collins of the Matrix of t			ed Sand G		ocation: PL=Pore Lining, M=Matrix. rs for Problematic Hydric Soils ³ :
-		cable to a			ieu.)			•
_ Histosol	(A1) pipedon (A2)		✓ Sandy Red Stripped M	. ,				Muck (A9) (LRR C) Muck (A10) (LRR B)
	istic (A3)		Suipped N		al (F1)			uced Vertic (F18)
	en Sulfide (A4)		Loamy Gle	-	. ,			Parent Material (TF2)
	d Layers (A5) (LRR	C)	Depleted I	-				r (Explain in Remarks)
	uck (A9) (LRR D)	-,	Redox Da				00	, p
	d Below Dark Surfa	ce (A11)	Depleted [
_ Thick Da	ark Surface (A12)		Redox De	pressions	(F8)		³ Indicator	s of hydrophytic vegetation and
_ Sandy N	Mucky Mineral (S1)		Vernal Poo	ols (F9)			wetlan	d hydrology must be present,
	Gleyed Matrix (S4)						unless	disturbed or problematic.
actrictiva	Layer (if present):							
estrictive								
_								
Type:	ches):						Hydric So	oil Present? Yes <u>√</u> No
Type: Depth (in							Hydric So	oil Present? Yes <u>√</u> No
Type:	ches):						Hydric So	oil Present? Yes <u>√</u> No
Type: Depth (in temarks: /DROLO	ches):	::		oly)				ondary Indicators (2 or more required)
Type: Depth (in emarks: 'DROLO 'etland Hy rimary India	ches):	::					Seco	
Type: Depth (in emarks: DROLO etland Hy rimary India _ Surface	oGY drology Indicators cators (minimum of	::	ed; check all that app	st (B11)			Sec.	ondary Indicators (2 or more required)
Type: Depth (in emarks: 'DROLO /etland Hy rimary India _ Surface	oGY drology Indicators cators (minimum of Water (A1) ater Table (A2)	::	ed; check all that app Salt Crus Biotic Cru	st (B11)	es (B13)		Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine)
Type: Depth (in emarks: /DROLO /etland Hy rimary India _ Surface _ High Wa _ Saturati	oGY drology Indicators cators (minimum of Water (A1) ater Table (A2)	: one requir	ed; check all that app Salt Crus Biotic Cru Aquatic I	st (B11) ust (B12)	, ,		Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Type: Depth (in emarks: /DROLO /etland Hy rimary India _ Surface _ High Wa _ Saturati _ Water M	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3)	one require	ed; check all that app Salt Crus Biotic Cru Aquatic II	st (B11) ust (B12) nvertebrate n Sulfide C	dor (C1)	J Living Roo	Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Type: Depth (in Temarks: TOROLO Vetland Hy rimary India Surface High Wa Saturati Water M Sedime	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive	one require	ed; check all that app Salt Crus Biotic Cru Aquatic I Hydroger) Oxidized	st (B11) ust (B12) nvertebrate n Sulfide C	odor (C1) eres along	_	Sec. ————————————————————————————————————	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Type: Depth (in Remarks: TOROLO Vetland Hy Inimary India Surface High Wa Saturati Water N Sedimei Drift De	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive int Deposits (B2) (No	one require	ed; check all that app Salt Crus Biotic Cru Aquatic I Hydroger Oxidized Presence	ust (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe	odor (C1) eres along ed Iron (C	_	Sec. ————————————————————————————————————	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type: Depth (in emarks: /DROLO /etland Hy rimary India Surface High Wa Saturati Water M Sedimea Drift De Surface	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive ant Deposits (B2) (Nonrive	one require one require onriverine erine)	ed; check all that app Salt Crus Biotic Cru Aquatic I Hydroger Oxidized Presence Recent Ir	ust (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe	odor (C1) eres along ed Iron (C ion in Tille	(4)	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Type: Depth (in emarks: /DROLO /etland Hy rimary India _ Surface _ High Wa _ Saturati _ Water M _ Sedime _ Drift De _ Surface / Inundati	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) darks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6)	one requirence or ine o	ed; check all that app Salt Crus Biotic Cru Aquatic I Hydroger Oxidized Presence Recent Ir	st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduc	odor (C1) eres along ed Iron (C ion in Tille (C7)	(4)	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS
Type: Depth (in temarks: //DROLO //etland Hy rimary India Surface High Wa Saturati Water M Sedime Drift De Surface /_ Inundati Water-S	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonriv Soil Cracks (B6) on Visible on Aerial stained Leaves (B9)	one requirence or ine o	ed; check all that app Salt Crus Biotic Cru Aquatic I Hydroger Oxidized Presence Recent Ir	st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct	odor (C1) eres along ed Iron (C ion in Tille (C7)	(4)	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Type: Depth (in Temarks: TOROLO Tetland Hy Trimary India Surface High Wa Saturati Water M Sedime Drift De Surface /_ Inundati Water-S ield Obser	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) darks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Visible on Aerial stained Leaves (B9) vations:	one requirence or ine o	ed; check all that app Salt Crus Biotic Cru Aquatic II Hydroger Oxidized Presence Recent Ir B7) Thin Muc	ot (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduct con Reduct ck Surface kplain in Re	odor (C1) eres along ed Iron (C ion in Tille (C7) emarks)	ed Soils (Co	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Type: Depth (in lemarks: /DROLO /etland Hy rimary India Surface High Wa Saturati Water M Sedimel Drift De Surface /_ Inundati Water-S ield Obser urface Wat	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonriv Soil Cracks (B6) on Visible on Aerial stained Leaves (B9) vations: er Present?	one require oniverine erine) Imagery (I	ed; check all that app Salt Crus Biotic Cru Aquatic II Hydroger Oxidized Presence Recent Ir B7) Thin Muc Other (Ex	ot (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct ck Surface xplain in Re	odor (C1) eres along ed Iron (C ion in Tille (C7) emarks)	ed Soils (Co	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Type: Depth (in Remarks: YDROLO Yetland Hy Primary India Surface High Wa Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) darks (B1) (Nonrive nt Deposits (B2) (Nonrive soil Cracks (B6) on Visible on Aerial stained Leaves (B9) vations: er Present? Present?	one requirence or ine o	ed; check all that app Salt Crus Biotic Cru Aquatic I Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex	st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct ck Surface kplain in Re nches):	odor (C1) eres along ed Iron (C tion in Tille (C7) emarks)	ed Soils (Co	Second Se	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Type: Depth (in Remarks: YDROLO Vetland Hy Primary India Surface High Wa Saturati Water M Sedimel Drift De Surface V Inundati Water-S Field Obser Surface Water Table Saturation P includes ca	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) darks (B1) (Nonrive nt Deposits (B2) (Nonrive soil Cracks (B6) on Visible on Aerial stained Leaves (B9) vations: er Present? Present? present?	one require one require onriverine erine) Imagery (I Yes Yes Yes	ed; check all that app Salt Crus Biotic Cru Aquatic I Hydroger Oxidized Presence Recent Ir B7) Thin Muc Other (Ex	st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct ck Surface explain in Re nches):	odor (C1) eres along ed Iron (C ion in Tilla (C7) emarks)	(4) ed Soils (Co	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type: Depth (in Remarks: YDROLO Vetland Hy Primary India Surface High Wa Saturati Water M Sedimel Drift De Surface V Inundati Water-S Gield Obser Surface Water Table Saturation P Includes ca	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) darks (B1) (Nonrive nt Deposits (B2) (Nonrive soil Cracks (B6) on Visible on Aerial stained Leaves (B9) vations: er Present? Present? present?	one require one require onriverine erine) Imagery (I Yes Yes Yes	ed; check all that app Salt Crus Biotic Cru Aquatic I Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex	st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct ck Surface explain in Re nches):	odor (C1) eres along ed Iron (C ion in Tilla (C7) emarks)	(4) ed Soils (Co	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type: Depth (in Remarks: YDROLO Yetland Hy Primary India Surface High Wa Saturati Water M Sedimel Drift De Surface V Inundati Water-S Field Obser Surface Wat Vater Table Saturation P Includes ca	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) darks (B1) (Nonrive nt Deposits (B2) (Nonrive soil Cracks (B6) on Visible on Aerial stained Leaves (B9) vations: er Present? Present? present?	one require one require onriverine erine) Imagery (I Yes Yes Yes	ed; check all that app Salt Crus Biotic Cru Aquatic I Hydroger Oxidized Presence Recent Ir B7) Thin Muc Other (Ex	st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct ck Surface explain in Re nches):	odor (C1) eres along ed Iron (C ion in Tilla (C7) emarks)	(4) ed Soils (Co	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) darks (B1) (Nonrive nt Deposits (B2) (Nonrive soil Cracks (B6) on Visible on Aerial stained Leaves (B9) vations: er Present? Present? present?	one require one require onriverine erine) Imagery (I Yes Yes Yes	ed; check all that app Salt Crus Biotic Cru Aquatic I Hydroger Oxidized Presence Recent Ir B7) Thin Muc Other (Ex	st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct ck Surface explain in Re nches):	odor (C1) eres along ed Iron (C ion in Tilla (C7) emarks)	(4) ed Soils (Co	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonriv Soil Cracks (B6) on Visible on Aerial stained Leaves (B9) vations: er Present? Present? Present? pillary fringe) corded Data (strean	one require one require onriverine erine) Imagery (I Yes Yes Yes m gauge, n	ed; check all that app Salt Crus Biotic Cru Aquatic I Hydroger Oxidized Presence Recent Ir Thin Muc Other (E: No ✓ Depth (i No ✓ Depth (i	st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduct con Reduct ck Surface explain in Re nches):	edor (C1) eres along ed Iron (C ion in Tille (C7) emarks)	wetl	Second Se	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Visible on Aerial stained Leaves (B9) vations: are Present? Present? present? present? present? present? corded Data (stream	one requirements onriverine erine) Imagery (I Yes Yes The gauge, n	ed; check all that app Salt Crus Biotic Cru Aquatic I Hydroger Oxidized Presence Recent Ir Thin Muc Other (E: No ✓ Depth (i No ✓ Depth (i	st (B11) ust (B12) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct ck Surface xplain in Re nches): nches): nches):	edor (C1) eres along ed Iron (C ion in Tille (C7) emarks)	wetl	Second Se	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) FAC-Neutral Test (D5)

Project/Site: Morton Bay Geothermal Project	City/C	ounty: Imperial	County	Sampling	Date: 3/	12/22
Applicant/Owner: Morton Bay Geothermal LLC			State:(CA Sampling	Point:	S-26
Investigator(s): R. Newton, M. King	Section	on, Township, Rar	nge: <u>S14 T11S R1</u>	L3E		
Landform (hillslope, terrace, etc.): shallow excavation	Local	relief (concave, o	convex, none): <u>no</u>	ne	Slope (%)):0
Subregion (LRR): <u>D - Interior Deserts</u>	Lat: <u>33.2062</u>	09	Long: -115.584	293	_ Datum: W	GS 84
Soil Map Unit Name: Imperial silty clay, wet						
Are climatic / hydrologic conditions on the site typical for th			_			
Are Vegetation, Soil, or Hydrology					′es √ 1	No
Are Vegetation, Soil, or Hydrology			eded, explain any			
SUMMARY OF FINDINGS – Attach site map						es, etc.
Hydrophytic Vegetation Present? Yes 1	No <u> </u>	Is the Sampled	Area			
Hydric Soil Present? Yes <u>√</u> !		within a Wetlan		s No_	✓	
Wetland Hydrology Present? Yes ✓ I	No					
Remarks:						
Semipermanently flooded palustrine excavarea was drier than normal at the time of s		2. The Antece	edent Precipita	ation Tool de	termined t	the
VEGETATION – Use scientific names of plan		ninant Indicator	Dominance Tes	t workshoot:		
Tree Stratum (Plot size:)	% Cover Spe		Number of Domi			
1				ACW, or FAC:	0	_ (A)
2			Total Number of	Dominant		
3			Species Across			_ (B)
4			Percent of Domi	nant Species		
Sapling/Shrub Stratum (Plot size:)	= To	tal Cover	That Are OBL, F	ACW, or FAC:	0	_ (A/B)
1			Prevalence Inde	ex worksheet:		
2.			Total % Cov	er of:	Multiply by:	
3			OBL species	x 1	=	
4				x 2		
5				x 3		
Herb Stratum (Plot size: 5' radius)	= To	tal Cover		× 4		
1				x 5	-	— (D)
2.			Column Totals:	(A)		(B)
3.			Prevalence	e Index = B/A = _	0	
4.			Hydrophytic Ve	getation Indicate	ors:	
5			Dominance			
6			Prevalence			
7			Morphologic	cal Adaptations ¹ (F emarks or on a se	rovide suppo	orting t)
8				Hydrophytic Vege	•	•
Woody Vine Stratum (Plot size:)	0 = To	tal Cover		71- 73	()	,
1				dric soil and wetla		must
2.			be present, unle	ss disturbed or pro	oblematic.	
	= To		Hydrophytic			
% Bare Ground in Herb Stratum	er of Biotic Crust _	0	Vegetation Present?	Yes	No <u>√</u>	
Remarks:			1			

			oth needed to docu		dicator (or confirm	the absence o	f indicators.)
Depth (inches)	Matri Color (moist)		Color (moist)	ox Features %	Type ¹	Loc ²	Texture	Remarks
<u> </u>					.,,,,,			· tomanto
<i>,</i> ,			I=Reduced Matrix, C			d Sand Gr		tion: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Ap	plicable to al	I LRRs, unless othe	rwise noted	d.)		Indicators for	or Problematic Hydric Soils ³ :
Histosol			Sandy Red	. ,				ıck (A9) (LRR C)
	pipedon (A2)		Stripped M					ıck (A10) (LRR B)
Black Hi	` '			cky Mineral (d Vertic (F18)
	n Sulfide (A4)			yed Matrix (I	F2)			ent Material (TF2)
	Layers (A5) (LF		Depleted N	` ,	•		Other (E	xplain in Remarks)
	ck (A9) (LRR D)			k Surface (F	,			
	d Below Dark Sur			ark Surface	. ,		3Indicators of	f hydrophytic vegetation and
	ark Surface (A12) lucky Mineral (S		Redox Dep	oressions (F8	o)			ydrology must be present,
	lleyed Matrix (S4		vernar Foc)IS (F9)			-	turbed or problematic.
	_ayer (if present						unicas dis	tarbed of problematic.
_	, (
Depth (inc							Hydric Soil P	resent? Yes No
Remarks:							Tryunc 3011 F	resent: res NO
IVDDOL O	O.V.							
IYDROLO								
_	drology Indicate							
Primary Indic	ators (minimum	of one require	ed; check all that app	ly)				ary Indicators (2 or more required)
✓ Surface	` ,		Salt Crus	` ,			·	ter Marks (B1) (Riverine)
High Wa	ter Table (A2)		Biotic Cru				Sec	diment Deposits (B2) (Riverine)
Saturation	, ,		Aquatic Ir		` '		Dri	ft Deposits (B3) (Riverine)
	arks (B1) (Nonri		Hydrogen					ainage Patterns (B10)
	nt Deposits (B2) (_	_		-Season Water Table (C2)
	oosits (B3) (Nonr	•		of Reduced	•	•		ayfish Burrows (C8)
	Soil Cracks (B6)			on Reduction		d Soils (C6		turation Visible on Aerial Imagery (C9)
	on Visible on Aer			k Surface (C				allow Aquitard (D3)
Water-S	tained Leaves (B	9)	Other (Ex	plain in Rem	narks)		FA	C-Neutral Test (D5)
Field Observ	vations:							
Surface Water	er Present?	·	No Depth (ir			_		
Water Table	Present?	Yes	No Depth (ir	nches):		_		
Saturation Pr		Yes	No Depth (ir	nches):		_ Wetla	and Hydrology	Present? Yes <u>√</u> No
(includes cap		200 20120 00	onitoring well, aerial	nhataa nray	daua ina	nactions)	if available:	
Describe Rec	corded Data (Stre	am gauge, m	onitoring well, aerial	priotos, prev	vious iris	pections),	ii avaliable.	
Danasalas								
Remarks:								

Project/Site: Morton Bay Geothermal Project	City/Count	y: <u>Imperial (</u>	County	Sampling Date:	3/12/22
Applicant/Owner: Morton Bay Geothermal LLC			State: CA	Sampling Point: _	S-27
Investigator(s): R. Newton, M. King	Section, T	ownship, Ran	ge: S14 T11S R13E		
Landform (hillslope, terrace, etc.): shallow excavation	Local relie	ef (concave, c	onvex, none): minor	concave Slop	e (%): <u>0-2</u>
Subregion (LRR): <u>D - Interior Deserts</u>	Lat: 33.212676		Long: -115.583677	Datur	n: WGS 84
Soil Map Unit Name: Imperial silty clay, wet					
Are climatic / hydrologic conditions on the site typical for th					
Are Vegetation, Soil, or Hydrology	-		Normal Circumstances		, No
Are Vegetation, Soil, or Hydrology			eded, explain any ansv		
SUMMARY OF FINDINGS – Attach site map				,	atures, etc.
Hydrophytic Vegetation Present? Yes ✓ N	ulo.				
Hydric Soil Present? Yes ✓ N	10	he Sampled		/	
Wetland Hydrology Present? Yes N		hin a Wetlan	d? Yes	✓ No	
Remarks:	<u> </u>				
Palustrine scrub-shrub wetland PSS-3 in area ma					
the study area. The Antecedent Precipitation To	ol determined the a	area was dr	ier than normal at	the time of sampl	ing.
VEGETATION – Use scientific names of plan	nts.				
	Absolute Dominan	nt Indicator	Dominance Test wo	rksheet:	
Tree Stratum (Plot size:)	% Cover Species?		Number of Dominant	Species	
1			That Are OBL, FACV	V, or FAC:1	(A)
2			Total Number of Don		
3			Species Across All S	trata: <u>1</u>	(B)
4	= Total C		Percent of Dominant		0 (A/D)
Sapling/Shrub Stratum (Plot size: 15' radius)	= 10tai 0	OVCI	That Are OBL, FACV		<u>J</u> (A/B)
1. Tamarix sp.	65Y	FAC	Prevalence Index w		
2			Total % Cover of		-
3			OBL species		
4			FACW species 65		
5		over	FACU species		
Herb Stratum (Plot size: 5' radius)		Ovei	UPL species		
1			Column Totals:		195 (B)
2					
3		F		ex = B/A =3.	<u>U</u>
4			Hydrophytic Vegeta ✓ Dominance Test		
5			✓ Prevalence Inde		
6				daptations ¹ (Provide s	supporting
8			data in Rema	rks or on a separate	sheet)
		over	Problematic Hyd	rophytic Vegetation ¹	(Explain)
Woody Vine Stratum (Plot size:)			1		
1			¹ Indicators of hydric s be present, unless di		
2			Liverantos	· · · · · · · · · · · · · · · · · · ·	
	= Total C	over	Hydrophytic Vegetation		
% Bare Ground in Herb Stratum 100 % Cove	er of Biotic Crust	0	Present?	res <u> </u>	
Remarks:					

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	<u>(</u>	Color (moist)	dox Features %	Type ¹	Loc²	Toyturo	Remarks
(inches)				_				
0-9	5 Y 6/2	80	5 YR 4/6		<u>C</u>	_ <u>M</u>		
9 - 18	5 Y 5/2	40					Cl	
	5 Y 6/2	40	5 YR 4/6	20	<u>C</u>	_ <u>M</u>	Cl	
-								
			M=Reduced Matrix,			ted Sand G		ation: PL=Pore Lining, M=Matrix.
		licable to a	II LRRs, unless oth		ed.)			for Problematic Hydric Soils ³ :
Histoso			Sandy Re	, ,				uck (A9) (LRR C)
	pipedon (A2) listic (A3)			Matrix (S6) ucky Mineral	(F1)			uck (A10) (LRR B) ed Vertic (F18)
	en Sulfide (A4)			eyed Matrix				rent Material (TF2)
	ed Layers (A5) (LR	R C)	✓ Depleted		(- –)			Explain in Remarks)
1 cm M	uck (A9) (LRR D)			ark Surface (I	F6)			
	ed Below Dark Sur		 ·	Dark Surface	, ,		2	
	ark Surface (A12)			epressions (F	8)			of hydrophytic vegetation and
-	Mucky Mineral (S1		Vernal Po	ools (F9)				nydrology must be present,
	Gleyed Matrix (S4) Layer (if present						unless dis	sturbed or problematic.
Type:	Layer (ii present	,.						
Depth (ir	ochee).						Hydric Soil I	Present? Yes √ No
Remarks:	icries).						Tiyunc 30ii i	rieseitt: Tes V NO
HYDROLC								
_	drology Indicato							
		of one requir	ed; check all that ap					dary Indicators (2 or more required)
· <u></u>	e Water (A1)		✓ Salt Cru				· 	ater Marks (B1) (Riverine)
	ater Table (A2)			ust (B12)				ediment Deposits (B2) (Riverine)
✓ Saturat				Invertebrates				ift Deposits (B3) (Riverine)
	Marks (B1) (Nonri v	•		n Sulfide Od	. ,	a Livina Do		rainage Patterns (B10) ry-Season Water Table (C2)
·	ent Deposits (B2) (l eposits (B3) (Nonri			e of Reduced		-		rayfish Burrows (C8)
·	e Soil Cracks (B6)	verille)		ron Reduction	•	•		aturation Visible on Aerial Imagery (C9)
· · · · · · · · · · · · · · · · · · ·	ion Visible on Aeri	al Imagery (ck Surface (0		ca oons (o		nallow Aquitard (D3)
· · · · · · · · · · · · · · · · · · ·	Stained Leaves (B		-	xplain in Rer	,		· · · · · · · · · · · · · · · · · · ·	AC-Neutral Test (D5)
Field Obser	•	-,						
	ter Present?	Yes	No ✓ Depth (inches):				
Water Table			No Depth (
Saturation F			No Depth (Wet	and Hvdrology	Present? Yes <u>√</u> No
(includes ca	pillary fringe)							
Describe Re	ecorded Data (stre	am gauge, n	nonitoring well, aeria	al photos, pre	evious ir	nspections),	if available:	
Damerilia								
Remarks:								

Project/Site: Morton Bay Geothermal Project	C	ity/County: Imperial	County	Sampling Date:	3/12/22
Applicant/Owner: Morton Bay Geothermal LLC			State: <u>CA</u>	Sampling Point:	S-28
Investigator(s): R. Newton, M. King	S	ection, Township, Ra	inge: <u>\$14 T11\$ R13E</u>		
Landform (hillslope, terrace, etc.): toe of road slope	L	ocal relief (concave,	convex, none): none	Slope	(%): <u>0-2</u>
Subregion (LRR): <u>D - Interior Deserts</u>	Lat: 33.2	12551	_ Long: <u>-115.583054</u>	Datum:	WGS 84
Soil Map Unit Name: Imperial silty clay, wet			NWI classi	ification: none	
Are climatic / hydrologic conditions on the site typical fo	r this time of year	? Yes No _	✓ (If no, explain in	ı Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly di	isturbed? Are '	"Normal Circumstances	s" present? Yes <u>√</u>	No
Are Vegetation, Soil, or Hydrology	naturally prob	lematic? (If ne	eeded, explain any ansv	wers in Remarks.)	
SUMMARY OF FINDINGS - Attach site m	ap showing s	sampling point l	ocations, transec	ts, important feat	ures, etc.
Hydrophytic Vegetation Present? Yes	_ No <u></u> ✓				
Hydric Soil Present? Yes	No <u>√</u>	Is the Sampled			
	No ✓	within a Wetlar	nd? Yes	No <u>√</u>	
Remarks:					
Paired upland point for S-27. Representa	ative sample	point taken outs	side the study are	a. The Anteceder	nt
Precipitation Tool determined the area v	•	-	-		
VEGETATION – Use scientific names of p	lante		· · ·		
VEGETATION – Use scientific flames of ρ		Dominant Indicator	Dominance Test wo	rkohoot:	
Tree Stratum (Plot size:)		Species? Status	Number of Dominant		
1.			That Are OBL, FACV	V, or FAC:0	(A)
2			Total Number of Dom	ninant	
3			Species Across All S		(B)
4			Percent of Dominant	Species	
Sapling/Shrub Stratum (Plot size:)	 -	= Total Cover	That Are OBL, FACW	V, or FAC:0	(A/B)
1			Prevalence Index w	orksheet:	
2.			Total % Cover of	f: Multiply b	y:
3.			OBL species	x 1 =	
4			FACW species	x 2 =	
5			· ·	x 3 =	
Herb Stratum (Plot size: 5' radius)	=	= Total Cover		x 4 =	
			UPL species		
1. 2.			Column Totals:	(A)	(B)
3			Prevalence Inde	ex = B/A =0	
4			Hydrophytic Vegeta	ition Indicators:	
5			Dominance Test	is >50%	
6			Prevalence Index		
7				daptations ¹ (Provide su Irks or on a separate sh	
8				rophytic Vegetation ¹ (E	•
Woody Vine Stratum (Plot size:)	=	= Total Cover	Troblematic riyu	rophytic vegetation (E	χριαιιί)
1			¹ Indicators of hydric s	soil and wetland hydrolo	ogy must
2.				sturbed or problematic.	
		= Total Cover	Hydrophytic		
% Bare Ground in Herb Stratum 100 % C			Vegetation	Yes No <u>√</u>	
Remarks:	over or blotte cre	151	Fresent:	162 NO Y	
Remarks.					

Profile Desc	ription: (Describ	e to the dep	th needed to docu	nent the i	ndicator	or confirn	n the absenc	e of indicators.)
Depth	Matrix			x Features	<u>s</u> 1		_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0 - 3	5 Y 6/2	<u>100</u>					SaCl	
3	shovel refusal							riprap
				-				
							-	-
	-			- ——				
¹Type: C=Co	oncentration, D=De	epletion, RM=	Reduced Matrix, CS	S=Covered	d or Coate	ed Sand Gi	rains. ² Lo	ocation: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Appl	icable to all	LRRs, unless othe	rwise note	ed.)		Indicator	s for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Red	ox (S5)			1 cm	Muck (A9) (LRR C)
Histic Ep	ipedon (A2)		Stripped Ma	` ,				Muck (A10) (LRR B)
Black His			Loamy Muc	-				uced Vertic (F18)
	n Sulfide (A4)		Loamy Gley		(F2)			Parent Material (TF2)
	Layers (A5) (LRF	R C)	Depleted M Redox Dark	, ,	(E6)		Othe	r (Explain in Remarks)
	ck (A9) (LRR D) I Below Dark Surfa	aca (A11)	Redox Dan	•	,			
	rk Surface (A12)	ace (ATT)	Redox Dep		, ,		3Indicator	s of hydrophytic vegetation and
	lucky Mineral (S1)		Vernal Pool		. •)			d hydrology must be present,
-	leyed Matrix (S4)			,				disturbed or problematic.
Restrictive L	ayer (if present):							
Type:								
Depth (inc	ches):						Hydric So	il Present? Yes No <u>√</u>
Remarks:								
HYDROLO	GY							
	drology Indicator	6.						
=			l; check all that appl				Coo	ander (Indicators (2 or more required)
	•	one required	, , , , , , , , , , , , , , , , , , , ,					ondary Indicators (2 or more required)
Surface \	` ,		Salt Crust	` '				Water Marks (B1) (Riverine)
	ter Table (A2)		Biotic Crus		- (D40)			Sediment Deposits (B2) (Riverine)
Saturatio		arina)	Aquatic In					Drift Deposits (B3) (Riverine)
	arks (B1) (Nonriv		Hydrogen			Living Boo		Drainage Patterns (B10)
	nt Deposits (B2) (N Posits (B3) (Nonri v		Presence		_	-		Dry-Season Water Table (C2) Crayfish Burrows (C8)
	Soil Cracks (B6)	refille)	Recent Iro		•	•	·	Saturation Visible on Aerial Imagery (C9)
	on Visible on Aeria	ıl İmanery (B7				u 00113 (00	· —	Shallow Aquitard (D3)
	tained Leaves (B9		Other (Ex				·	FAC-Neutral Test (D5)
Field Observ		,	01.101 (EX					77.6 7.64.4.4 7.66 (2.6)
Surface Water		Ves I	No <u>✓</u> Depth (in	ches).				
Water Table			No <u>✓</u> Depth (in					
							and Undrala	my Drecont2 Voc. No. /
Saturation Pr (includes cap		Yes I	No <u>✓</u> Depth (in	cnes):		vveti	and Hydrolo	gy Present? Yes No _✓
		m gauge, mo	nitoring well, aerial	photos, pr	evious ins	spections),	if available:	
Remarks:								

Project/Site: Morton Bay Geothermal	Project	(City/County:	Imperial	County	Sa	mpling Date: _	3/12/22
Applicant/Owner: Morton Bay Geother	mal LLC				State:	CA Sa	mpling Point:	S-29
Investigator(s): R. Newton, M. King			Section, Tow	nship, Raı	nge: <u>\$14 T11\$ F</u>	R13E		
Landform (hillslope, terrace, etc.): shallo	w excavatic	on	Local relief (concave, o	convex, none): <u>C</u>	oncave	Slo	pe (%): <u>0-3</u>
Subregion (LRR): <u>D - Interior Deserts</u>		Lat: <u>33.2</u>	21248		Long: -115.58	37016	Datu	ım: WGS 84
Soil Map Unit Name: Fluvaquents, salii	ne				NWI	classificatio	n: L2USCx	
Are climatic / hydrologic conditions on the	site typical fo	or this time of yea	ar? Yes	No	✓ (If no, exp	lain in Rema	arks.)	
Are Vegetation, Soil, or H	ydrology	significantly of	disturbed?	Are "	Normal Circumst	ances" prese	ent? Yes	✓ No
Are Vegetation, Soil, or H					eded, explain an			
SUMMARY OF FINDINGS - Att	ach site m	nap showing	sampling	point le	ocations, tra	nsects, in	nportant fe	atures, etc.
Hydrophytic Vegetation Present?	Vec	_ No <u> </u>						
Hydric Soil Present?		No	l l	Sampled			/	
Wetland Hydrology Present?		No	l l	n a Wetlar		es	No <u>√</u>	_
Remarks:			<u> </u>					
Seasonally flooded palustrine salt coverage and depth. The Anteced	ent Precipit	tation Tool det						
VEGETATION – Use scientific r	names of p	Absolute	Dominant	Indicator	Dominance Te	ot worksho	<u></u>	
Tree Stratum (Plot size:		% Cover	Species?	Status	Number of Dor That Are OBL,	ninant Speci	es) (A)
2					Total Number of Species Across			(B)
4					Percent of Don	ninant Specie		
Sapling/Shrub Stratum (Plot size:)		= Total Cov	er	That Are OBL,	FACW, or F	AC: <u>C</u>	<u>)</u> (A/B)
1					Prevalence In	dex worksh	eet:	
2					Total % Co	over of:	Multipl	y by:
3					OBL species		_ x 1 =	
4					FACW species			
5					FAC species			
Herb Stratum (Plot size: 5' radius	1		= Total Cov	er	FACU species			
1							_ x 5 =	
2.					Column Totals:	·	_ (A)	(B)
3.					Prevalen	ce Index = E	B/A =	0
4.					Hydrophytic V	egetation Ir	ndicators:	
5.					Dominance	e Test is >50	1%	
6.					Prevalence	e Index is ≤3	.0 ¹	
7							ions¹ (Provide on a separate	
			= Total Cov		Problemat	ic Hydrophyt	ic Vegetation ¹	(Explain)
Woody Vine Stratum (Plot size:					¹ Indicators of h be present, unl			
2			= Total Cov		Hydrophytic			
% Bare Ground in Herb Stratum10	<u>10 </u>	Cover of Biotic Cr	rust 0		Vegetation Present?	Yes	No	<u> </u>
Remarks:								

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Color (moist)	%	Color (moist)	ox Features	S Type ¹	Loc ²	Texture	Remarks
0 - 16	5 Y 6/2	80	5 YR 4/6	20	C	M	Cl	
<u> </u>	3 1 0/2	_ 80	<u> </u>			_ <u></u>	<u>Ci</u>	
						-		
					-			-
					-			
Type: C=C	oncentration, D=Dep	oletion, RM	=Reduced Matrix, C	S=Covered	d or Coat	ed Sand G	rains. ² Lo	cation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	cable to all	LRRs, unless other	erwise note	ed.)		Indicators	for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Red	dox (S5)			1 cm l	Muck (A9) (LRR C)
	pipedon (A2)		Stripped M	. ,				Muck (A10) (LRR B)
	istic (A3)		Loamy Mu					ced Vertic (F18)
	en Sulfide (A4)		Loamy Gle	•	(F2)			arent Material (TF2)
	d Layers (A5) (LRR	C)	✓ Depleted N		(FC)		Other	(Explain in Remarks)
	uck (A9) (LRR D)	oo (A11)		rk Surface (Dark Surfac				
	d Below Dark Surfac ark Surface (A12)	æ (ATT)		pressions (I			3Indicators	of hydrophytic vegetation and
	Mucky Mineral (S1)		Vernal Poo		0)			hydrology must be present,
	Gleyed Matrix (S4)			. · · · · ·				listurbed or problematic.
	Layer (if present):							
_								
Type:			<u>-</u>				Hydric Soil	Present? Yes <u>√</u> No
Type: Depth (in	ches):							
	ches):						11,4110 0011	100 <u>v</u> 110 <u> </u>
Depth (in							,	
Depth (in Remarks:							,	
Depth (in Remarks: YDROLO Wetland Hy	o G Y	:		oly)				ndary Indicators (2 or more required)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi	IGY drology Indicators	:					Seco	
Depth (in Remarks: YDROLO Wetland Hy Primary Indi Surface	OGY drology Indicators cators (minimum of	:	d; check all that app	t (B11)			Secoi	ndary Indicators (2 or more required)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi Surface	drology Indicators cators (minimum of o Water (A1) ater Table (A2)	:	d; check all that app Salt Crus Biotic Cru	t (B11)	s (B13)		<u>Seco</u> V S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati	drology Indicators cators (minimum of o Water (A1) ater Table (A2)	: one require	d; check all that app Salt Crus Biotic Cru	it (B11) ust (B12) nvertebrate			Secon	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati Water M	drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3)	: one require	d; check all that app Salt Crus Biotic Cru Aquatic Iu Hydroger	et (B11) ust (B12) nvertebrate n Sulfide Od	dor (C1)	J Living Roo	Secol V S C	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati Water M Sedime	drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive	: one require rine) nriverine)	d; check all that app Salt Crus Biotic Cru Aquatic Iı Hydroger Oxidized	et (B11) ust (B12) nvertebrate n Sulfide Od	dor (C1) res along	•	Secon V V V V V V V V V V V V V V V V V V V	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati Water M Sedime Drift De	drology Indicators cators (minimum of of of other (A1) ater Table (A2) on (A3) darks (B1) (Nonrivelent Deposits (B2) (No	: one require rine) nriverine)	d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence	t (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe	dor (C1) res along ed Iron (C	(4)	Secon V S C C ots (C3) C	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati Water M Sedime Drift De Surface	drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive	: one required rine) onriverine)	d; check all that app Salt Crus Biotic Cru Aquatic II Hydroger Oxidized Presence Recent Ir	et (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe e of Reduce	dor (C1) res along ed Iron (C on in Tille	(4)	Secon V S C Dots (C3) C C S S S S S S S S S S S S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8)
Primary Indi ✓ Surface ✓ High Wa ✓ Saturati Water M Sedime Drift De Surface Inundati	drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6)	: one required rine) onriverine)	d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir 7) Thin Muc	t (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe e of Reduce on Reducti	dor (C1) res along ed Iron (C on in Tille C7)	(4)	Secon V S C C C C C C	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Primary Indi ✓ Surface ✓ High Wa ✓ Saturati Water M Sedime Drift De Surface Inundati	drology Indicators cators (minimum of of Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial stained Leaves (B9)	: one required rine) onriverine)	d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir 7) Thin Muc	et (B11) Just (B12) Invertebrate In Sulfide Od Rhizosphe In Greduce In Sulfide Od Rhizosphe In Greduce In Sulfide Od Rhizosphe In Greduce	dor (C1) res along ed Iron (C on in Tille C7)	(4)	Secon V S C C C C C C	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser	drology Indicators cators (minimum of of of other (A1) ater Table (A2) on (A3) darks (B1) (Nonrive nt Deposits (B2) (Nonrive posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial stained Leaves (B9) rvations:	: one required rine) orine) Imagery (B	d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir 7) Thin Muc	et (B11) ust (B12) envertebrate en Sulfide Od Rhizosphe e of Reduce on Reducti ek Surface (kplain in Re	dor (C1) res along d Iron (C on in Tille C7) emarks)	(4)	Secon V S C C C C C C	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser	drology Indicators cators (minimum of of other cators) Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriveron to Deposits (B2) (Nonriveron to Deposits (B3) (Nonriveron to Cracks (B6) ion Visible on Aerial Stained Leaves (B9) vations: ter Present?	: pone require ponriverine) porriverine) Imagery (B	d; check all that app Salt Crus Biotic Cru Aquatic II Hydroger Oxidized Presence Recent Ir 7) Thin Muc Other (Ex	at (B11) ust (B12) nvertebrate n Sulfide Oo Rhizosphe e of Reduce on Reducti k Surface (xplain in Re	dor (C1) res along d Iron (C on in Tille C7) emarks)	(4)	Secon V S C C C C C C	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati Water N Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table	drology Indicators cators (minimum of of water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial Stained Leaves (B9) vations: ter Present?	: pne required prine) priverine) lmagery (B	d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir 7) Thin Muc Other (Ex	at (B11) ust (B12) nvertebrate n Sulfide Od Rhizosphe e of Reduce on Reducti k Surface (kplain in Re nches): ~ 5 nches): 1	dor (C1) res along ed Iron (C on in Tille C7) emarks)		Secon V S C C C C C C C C C C C S F F	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati — Water M — Sedime — Drift De — Surface — Inundati — Water-S Field Obser Surface Wat Water Table Saturation Princludes ca	drology Indicators cators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial Stained Leaves (B9) rvations: are Present?	: pne required rine) priverine) lmagery (B //es/ //es/	d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex	t (B11) ust (B12) nvertebrate n Sulfide Od Rhizosphe e of Reduce on Reducti k Surface (kplain in Re nches): ~ 5 nches): Sul	dor (C1) res along d Iron (C on in Tille C7) emarks)		Secon V S C C C C C C C C C C C C S F	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati — Water M — Sedime — Drift De — Surface — Inundati — Water-S Field Obser Surface Wat Water Table Saturation Princludes ca	drology Indicators cators (minimum of of other trapped (A2) on (A3) Marks (B1) (Nonriver trapped (B2) (Nonriver trapped (B3) (Nonriver tr	: pne required rine) priverine) lmagery (B //es/ //es/	d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex	t (B11) ust (B12) nvertebrate n Sulfide Od Rhizosphe e of Reduce on Reducti k Surface (kplain in Re nches): ~ 5 nches): Sul	dor (C1) res along d Iron (C on in Tille C7) emarks)		Secon V S C C C C C C C C C C C C S F	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati — Water N — Sedime — Drift De — Surface Inundati — Water-S Field Obser Surface Wat Water Table Saturation P includes ca Describe Re	drology Indicators cators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial Stained Leaves (B9) rvations: are Present?	: pne required rine) priverine) lmagery (B //es/ //es/	d; check all that app Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex	t (B11) ust (B12) nvertebrate n Sulfide Od Rhizosphe e of Reduce on Reducti k Surface (kplain in Re nches): ~ 5 nches): Sul	dor (C1) res along d Iron (C on in Tille C7) emarks)		Secon V S C C C C C C C C C C C C S F	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation Princludes ca Describe Res Remarks:	drology Indicators cators (minimum of of other cators (minimum of other	ine) prine) prine) Imagery (B //es/ //es/ n gauge, mo	d; check all that app Salt Crus Biotic Cru Aquatic In Hydroger Oxidized Presence Recent Ir 7) Thin Muc Other (Ex) No Depth (in No Depth (in No Depth (in	at (B11) Just (B12) Invertebrate In Sulfide Oct Rhizosphe In of Reduce In Sulfide Oct Rhizosphe In of Reduce In Sulfide Oct In of Reduce In of Red	dor (C1) res along d Iron (C on in Tille C7) emarks)		Secon V S C C C C C C C C C C C C S F	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation Princludes ca Describe Res Remarks:	drology Indicators cators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial Stained Leaves (B9) rvations: are Present?	ine) prine) prine) Imagery (B //es/ //es/ n gauge, mo	d; check all that app Salt Crus Biotic Cru Aquatic In Hydroger Oxidized Presence Recent Ir 7) Thin Muc Other (Ex) No Depth (in No Depth (in No Depth (in	at (B11) Just (B12) Invertebrate In Sulfide Oct Rhizosphe In of Reduce In Sulfide Oct Rhizosphe In of Reduce In Sulfide Oct In of Reduce In of Red	dor (C1) res along d Iron (C on in Tille C7) emarks)		Secon V S C C C C C C C C C C C C S F	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (in Remarks: YDROLO Wetland Hy Primary Indi ✓ Surface ✓ High Wa ✓ Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation Princludes ca Describe Res Remarks:	drology Indicators cators (minimum of of other cators (minimum of other	ine) prine) prine) Imagery (B //es/ //es/ n gauge, mo	d; check all that app Salt Crus Biotic Cru Aquatic In Hydroger Oxidized Presence Recent Ir 7) Thin Muc Other (Ex) No Depth (in No Depth (in No Depth (in	at (B11) Just (B12) Invertebrate In Sulfide Oct Rhizosphe In of Reduce In Sulfide Oct Rhizosphe In of Reduce In Sulfide Oct In of Reduce In of Red	dor (C1) res along d Iron (C on in Tille C7) emarks)		Secon V S C C C C C C C C C C C C S F	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)

Project/Site: Morton Bay Geothermal Project	City/0	County: <u>Imperial</u>	County	_ Sampling Date:	3/12/22
Applicant/Owner: Morton Bay Geothermal LLC			State: <u>CA</u>	_ Sampling Point: _	S-30
Investigator(s): R. Newton, M. King	Sect	ion, Township, Ra	nge: <u>S14 T11S R13E</u>		
Landform (hillslope, terrace, etc.): shallow excava	taion Loca	al relief (concave,	convex, none): none	Slop	e (%): <u>0</u>
Subregion (LRR): D - Interior Deserts	Lat: 33.212	198	Long: <u>-115.586996</u>	Datum	n: WGS 84
Soil Map Unit Name: Fluvaquents, saline			NWI classif	ication: L2USCx	
Are climatic / hydrologic conditions on the site typical	al for this time of year?	Yes No _	✓ (If no, explain in	Remarks.)	
Are Vegetation, Soil, or Hydrology _	significantly distu	rbed? Are	'Normal Circumstances"	present? Yes <u>√</u>	No
Are Vegetation, Soil, or Hydrology _	naturally problem	atic? (If ne	eeded, explain any answ	ers in Remarks.)	
SUMMARY OF FINDINGS - Attach site	map showing sar	npling point l	ocations, transect	s, important fea	atures, etc.
Lhadasahatia Vasahtias Baasado Vas	No. /				
	No <u>✓</u> No	Is the Sampled		,	
	No <u>✓</u>	within a Wetlar	nd? Yes	No <u>√</u>	
Remarks:					
Area mapped by NWI as excavated lake	e and by NHD as a	n intermittent	reservoir but lack	ing hydrology in	idicators.
The Antecedent Precipitation Tool dete					
VECETATION Lies scientific names o	f plants				
VEGETATION – Use scientific names o		minant Indicator	Dominance Test wor	rkehoot:	
Tree Stratum (Plot size:)		ecies? Status	Number of Dominant		
1			That Are OBL, FACW	, or FAC: <u>0</u>	(A)
2			Total Number of Domi	inant	
3			Species Across All Str		(B)
4			Percent of Dominant S	Species	
Sapling/Shrub Stratum (Plot size:	= To	otal Cover	That Are OBL, FACW	, or FAC: <u>0</u>	(A/B)
1			Prevalence Index wo	orksheet:	
2.			Total % Cover of:	Multiply	by:
3.			OBL species	x 1 =	
4			FACW species	x 2 =	
5			FAC species		
Herb Stratum (Plot size: 5' radius)	= To	otal Cover	FACU species		
			UPL species		
1 2			Column Totals:	(A)	(B)
3.			Prevalence Inde	ex = B/A =0	<u> </u>
4.			Hydrophytic Vegetat	ion Indicators:	
5.			Dominance Test i	s >50%	
6			Prevalence Index		
7			Morphological Ad	aptations ¹ (Provide s ks or on a separate s	supporting
8			Problematic Hydr	•	•
Mandy Vino Stratum (Diot size:	0 = To	otal Cover	r roblematic rryar	spriyae vegetation (LAPIAIII)
Woody Vine Stratum (Plot size:) 1.			¹ Indicators of hydric se	oil and wetland hydro	ology must
2.			be present, unless dis		
	= To	otal Cover	Hydrophytic		
% Bare Ground in Herb Stratum100	% Cover of Riotic Crust	0	Vegetation Present? Y	es No_ <u>√</u>	/
Remarks:	70 COVEL OF BIOLIC CIUSE.		riesent: i	<u> </u>	
Remarks.					

Depth	cription: (Describe Matrix		pth needed to docu Red	ment the	es				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	<u>Loc</u> ²	Texture	Remarks	
0 - 16	5 Y 6/2	80	5 YR 4/6	20	<u>C</u>	_M	<u>Cl</u>		
			· -			_	_		
				_					
							_	_	
							_		
					_		_		
							<u> </u>	_	
			1=Reduced Matrix, C			ed Sand		ocation: PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Applic	able to al	I LRRs, unless other	erwise no	ted.)		Indicato	rs for Problematic Hydric Soils ³ :	
Histosol (A1) Sandy Redox (S5)							1 cm Muck (A9) (LRR C)		
	pipedon (A2)		Stripped M				2 cm Muck (A10) (LRR B)		
	istic (A3)		Loamy Mu				Reduced Vertic (F18)		
	en Sulfide (A4) d Layers (A5) (LRR (C /	Loamy Gle ✓ Depleted M	•	. ,		Red Parent Material (TF2) Other (Explain in Remarks)		
	uck (A9) (LRR D)	C)	Redox Dar				Otne	er (Explain in Remarks)	
	d Below Dark Surfac	e (A11)	Depleted D						
	ark Surface (A12)	,	Redox Dep				³ Indicato	rs of hydrophytic vegetation and	
	Aucky Mineral (S1)		Vernal Poo		(- /		wetland hydrology must be present,		
	Gleyed Matrix (S4)		· 	` ,				s disturbed or problematic.	
Restrictive	Layer (if present):								
Type:			<u></u>						
Depth (inches):						Hydric Soil Present? Yes No			
Remarks:							•		
YDROLO									
_	drology Indicators:						_		
Primary Indi	cators (minimum of o	one require	ed; check all that app	oly)			<u>Sec</u>	condary Indicators (2 or more required)	
	Surface Water (A1) Salt Crust (B11)						_	Water Marks (B1) (Riverine)	
High Water Table (A2) Biotic Crust (B12)								Sediment Deposits (B2) (Riverine)	
Saturation (A3) Aquatic Invertebrates (B13)							_	Drift Deposits (B3) (Riverine)	
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)						·	Drainage Patterns (B10)		
Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Re								-	
Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)						·	Crayfish Burrows (C8)		
Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9		
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7)								Shallow Aquitard (D3)	
	Stained Leaves (B9)		Other (Ex	plain in R	emarks)			FAC-Neutral Test (D5)	
Field Obser			,						
Surface Wat			No <u>✓</u> Depth (ir						
Nater Table Present? Yes No _ ✓ Depth (inches):									
						We	Wetland Hydrology Present? Yes No✓		
	pillary fringe)	, dange ~	nonitoring well, aerial	nhotos =	revieus is:	enections	a) if available:		
Describe Re	corded Data (Stream	ı gauge, ii	ioriitoring well, aerial	priotos, p	revious iris	spections	s), ii avaliable.		
Domorks:									
Remarks:									