

## DOCKETED

<b>Docket Number:</b>	09-AFC-07C
<b>Project Title:</b>	Palen Solar Power Project - Compliance
<b>TN #:</b>	200188
<b>Document Title:</b>	PSH's RESPONSE TO STAFF'S 8/2/13 EMAIL REQUEST
<b>Description:</b>	N/A
<b>Filer:</b>	Marie Fleming
<b>Organization:</b>	Galati   Blek LLP
<b>Submitter Role:</b>	Applicant's Representative
<b>Submission Date:</b>	8/13/2013 4:48:40 PM
<b>Docketed Date:</b>	8/13/2013

August 13, 2013

California Energy Commission  
Dockets Unit  
1516 Ninth Street  
Sacramento, CA 95814-5512

**Subject: PSH's RESPONSE TO STAFF'S 8/2/13 EMAIL REQUEST-  
ADDITIONAL DATA SHEETS AND CNDDDB REPORT FORMS FOR  
SPRING 2013 SUPPLEMENTAL BIOLOGICAL RESOURCE SURVEYS  
PALEN SOLAR ELECTRIC GENERATING SYSTEM  
DOCKET NO. (09-AFC-7C)**

Enclosed for filing with the California Energy Commission is the electronic version of **PSH's RESPONSE TO STAFF'S 8/2/13 EMAIL REQUEST- ADDITIONAL DATA SHEETS AND CNDDDB REPORT FORMS FOR SPRING 2013 SUPPLEMENTAL BIOLOGICAL RESOURCE SURVEYS**, for Palen Solar Electric Generating System (09-AFC-7C).

Sincerely,



Marie Fleming

## Andrea Grenier

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**From:** Andrea Grenier <Andrea@agrenier.com>  
**Sent:** Tuesday, August 13, 2013 2:33 PM  
**To:** 'Martin-Gallardo, Jennifer@Energy'; 'Crisp, Ann@Energy' (Ann.Crisp@energy.ca.gov); Stora, Christine@Energy  
**Cc:** 'Scott Galati'; Scott Blek; 'Marie Fleming'  
**Subject:** RE: Palen - questions for BSE  
**Attachments:** A. Karl CNDDDB report forms.pdf; Karl data sheets set 1 of 4.pdf; Karl data sheets set 2 of 4.pdf; Karl data sheets set 3 of 4.pdf; Karl data sheets set 4 of 4.pdf

Jennifer, Ann, and Christine:

Please see our responses below embedded into Ann's email to Jennifer and Christine. Marie Fleming will docket this email and the attached PDFs.

*Andrea Grenier*

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**From:** Martin-Gallardo, Jennifer@Energy [<mailto:Jennifer.Martin-Gallardo@energy.ca.gov>]  
**Sent:** Wednesday, August 07, 2013 9:35 AM  
**To:** [Andrea@agrenier.com](mailto:Andrea@agrenier.com); Scott Galati  
**Subject:** FW: Palen - questions for BSE

FYI. Please give me a call to discuss.

Thanks!

Jen

---

**From:** Crisp, Ann@Energy  
**Sent:** Wednesday, August 07, 2013 8:25 AM  
**To:** Martin-Gallardo, Jennifer@Energy; Stora, Christine@Energy  
**Cc:** Knight, Eric@Energy; Ali, Anwar@Energy; Watson, Carol@Energy; 'Chris Huntley'  
**Subject:** FW: Palen - questions for BSE

Hi Jen

I need answers to these questions ASAP to get into my analysis, as well as the promised Lake and Streambed Alteration Notification.

Thanks!

Ann

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**From:** Crisp, Ann Energy  
**Sent:** Friday, August 02, 2013 3:23 PM  
**To:** Martin-Gallardo, Jennifer@Energy; Stora, Christine@Energy  
**Subject:** Palen - questions for BSE

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Hi Jen,

This is the information I require from PSH to complete the FSA.

Missing information from SUPPLEMENTAL SPRING 2013 BIOLOGICAL SURVEYS Report (not addressing avian and bats)

- Per the methods in the Supplemental Spring Survey Report (July 2013) it states that “All individuals of cacti, yucca and trees protected by the California Desert Native Plant Act (CDNPA) also were tallied, with mapping occurring by individuals, populations or Project segment, depending on biological relevancy or practicality.” A map of these species tallied on page 25, Table 4.

*Response: This is a County requirement which only requires the tabulated data already provided by segment in Table 4. None of the BLM cactus species were present on the modified linears.*

- Burrowing Owl survey report: Signed field forms, photos, etc., as appendices to the field survey report. Only a sample form from the survey on May 5 was provided.

*Response: Please see additional data sheets attached to this email. These are being provided solely to assist Staff—please note that submittal of field forms is only a recommendation in the protocols, and not a specific requirement. Photos were provided in the report.*

- Desert Tortoise and all other wildlife: Need all data sheets from all surveys not just sample data sheets.

*Response: Please see additional data sheets attached to this email. These are being provided solely to assist Staff—submittal of field forms is not required by any protocols.*

Clarification on PSH LLC's Final Sand Transport Study

Are both columns on Table 1, page 13 impacts to Zone 3. Please provide indirect impacts based on percentage reduction of sand input ranges of: “25 - 50%”, “50 - 75%”, “75 - 100%”. This group of ranges is what was used to determine indirect impacts for the approved PSPP and used in the BIO-29 table.

*Response: PSH does not agree with the break down proposed by Staff. A revised figure that removes the word “deflation” from Figure 18 will be docketed as soon as possible.*

Clarification of how MFTL BIO-29 acres of direct impacts were calculated

Confirm which GIS files were used to calculate acres of direct impact and send to Energy Commission cartography if not already provided and provide description of how MFTL acres were calculated.

*Response: We received a similar email request from Jacque Gilbreath – our GIS consultant, Neil Storey, has communicated with her on this issue and we believe it is resolved.*

Thanks!

Ann

Mail to:  
California Natural Diversity Database  
California Dept. of Fish & Wildlife  
1807 13<sup>th</sup> Street, Suite 202  
Sacramento, CA 95811  
Fax: (916) 324-0475 email: CNDDDB@wildlife.ca.gov

For Office Use Only

Source Code \_\_\_\_\_ Quad Code \_\_\_\_\_  
Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work (mm/dd/yyyy): 05252013

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: Athene cunicularia

Common Name: Burrowing owl

Species Found?  Yes  No If not, why? \_\_\_\_\_

Total No. Individuals 1 Subsequent Visit?  yes  no

Is this an existing NDDDB occurrence?  no  unk.  
Yes, Occ. # \_\_\_\_\_

Collection? If yes: \_\_\_\_\_  
Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Alice Karl

Address: P.O. Box 74006  
Davis, CA 95617

E-mail Address: heliophile@mindspring.com

Phone: (530) 666-9567

Plant Information

Phenology: \_\_\_\_\_% vegetative \_\_\_\_\_% flowering \_\_\_\_\_% fruiting

Animal Information

1  
# adults # juveniles # larvae # egg masses # unknown  
 wintering  breeding  nesting  rookery  burrow site  other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

East of Desert Center, north of I-10 near Corn Springs exit

County: Riverside Landowner / Mgr.: BLM

Quad Name: \_\_\_\_\_ Elevation: \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S GPS Make & Model Garmin Map 76CSx

DATUM: NAD27  NAD83  WGS84  Horizontal Accuracy 3m meters/feet

Coordinate System: UTM Zone 10  UTM Zone 11  OR Geographic (Latitude & Longitude)

Coordinates: 0665070E 3727736N

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Single bird; flew from perch. No definitive coversite found, although possible burrow at 0665067E 3727684N

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population):  Excellent  Good  Fair  Poor

Immediate AND surrounding land use:

Visible disturbances:

Threats:

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): \_\_\_\_\_
- Compared with specimen housed at: \_\_\_\_\_
- Compared with photo / drawing in: \_\_\_\_\_
- By another person (name): \_\_\_\_\_
- Other: \_\_\_\_\_

Photographs: (check one or more) Slide Print Digital

Plant / animal     
Habitat     
Diagnostic feature

May we obtain duplicates at our expense? yes  no

Mail to:  
California Natural Diversity Database  
California Dept. of Fish & Wildlife  
1807 13<sup>th</sup> Street, Suite 202  
Sacramento, CA 95811  
Fax: (916) 324-0475 email: CNDDB@wildlife.ca.gov

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EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work (mm/dd/yyyy): 04072013

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: Athene cunicularia

Common Name: Burrowing owl

Species Found?  Yes  No \_\_\_\_\_  
If not, why?

Total No. Individuals 1 Subsequent Visit?  yes  no

Is this an existing NDDB occurrence? \_\_\_\_\_  no  unk.  
Yes, Occ. #

Collection? If yes: \_\_\_\_\_  
Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Alice Karl

Address: P.O. Box 74006  
Davis, CA 95617

E-mail Address: heliophile@mindspring.com

Phone: (530) 666-9567

Plant Information

Phenology: \_\_\_\_\_% vegetative \_\_\_\_\_% flowering \_\_\_\_\_% fruiting

Animal Information

1  
# adults # juveniles # larvae # egg masses # unknown  
 wintering  breeding  nesting  rookery  burrow site  other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

East of Desert Center, north of I-10

County: Riverside Landowner / Mgr.: BLM

Quad Name: \_\_\_\_\_ Elevation: \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S  Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S  GPS Make & Model Gamin Map 76CSx

DATUM: NAD27  NAD83  WGS84  Horizontal Accuracy 3m meters/feet

Coordinate System: UTM Zone 10  UTM Zone 11  OR Geographic (Latitude & Longitude)

Coordinates: 0656370E 3730844N

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Single bird in wash; flew. No burrow.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population):  Excellent  Good  Fair  Poor

Immediate AND surrounding land use:

Visible disturbances:

Threats:

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): \_\_\_\_\_  
 Compared with specimen housed at: \_\_\_\_\_  
 Compared with photo / drawing in: \_\_\_\_\_  
 By another person (name): \_\_\_\_\_  
 Other \_\_\_\_\_

Photographs: (check one or more) Slide Print Digital

Plant / animal     
Habitat     
Diagnostic feature

May we obtain duplicates at our expense? yes  no

Mail to:  
California Natural Diversity Database  
California Dept. of Fish & Wildlife  
1807 13<sup>th</sup> Street, Suite 202  
Sacramento, CA 95811  
Fax: (916) 324-0475 email: CNDDDB@wildlife.ca.gov

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Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work (mm/dd/yyyy): 0505 2013

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: Lanius ludovicianus

Common Name: Loggerhead shrike

Species Found?  Yes  No If not, why? \_\_\_\_\_

Total No. Individuals 2 Subsequent Visit?  yes  no

Is this an existing NDDDB occurrence?  yes, Occ. # \_\_\_\_\_  no  unk.

Collection? If yes: \_\_\_\_\_  
Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Alice Karl

Address: P.O. Box 74006  
Davis, CA 95617

E-mail Address: heliophile@mindspring.com

Phone: (530) 666-9567

Plant Information

Phenology: \_\_\_\_\_% vegetative \_\_\_\_\_% flowering \_\_\_\_\_% fruiting

Animal Information

# adults 1 # juveniles 1 # larvae \_\_\_\_\_ # egg masses \_\_\_\_\_ # unknown \_\_\_\_\_  
 wintering  breeding  nesting  rookery  burrow site  other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

East of Desert Center, north of I-10

County: Riverside Landowner / Mgr.: BLM

Quad Name: \_\_\_\_\_ Elevation: \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S GPS Make & Model Garmin Map 76CSx

DATUM: NAD27  NAD83  WGS84  Horizontal Accuracy 3m meters/feet

Coordinate System: UTM Zone 10  UTM Zone 11  OR Geographic (Latitude & Longitude)

Coordinates: 0656067E 3731582N

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Juvenile begging to adult.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population):  Excellent  Good  Fair  Poor

Immediate AND surrounding land use:

Visible disturbances:

Threats:

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): \_\_\_\_\_
- Compared with specimen housed at: \_\_\_\_\_
- Compared with photo / drawing in: \_\_\_\_\_
- By another person (name): \_\_\_\_\_
- Other \_\_\_\_\_

Photographs: (check one or more) Slide Print Digital

- Plant / animal
- Habitat
- Diagnostic feature

May we obtain duplicates at our expense? yes  no

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Sacramento, CA 95811  
Fax: (916) 324-0475 email: CNDDDB@wildlife.ca.gov

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Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work (mm/dd/yyyy): 05052013

Reset

### California Native Species Field Survey Form

Send Form

Scientific Name: Lanius ludovicianus

Common Name: Loggerhead shrike

Species Found?  Yes  No \_\_\_\_\_  
If not, why?

Total No. Individuals 1 Subsequent Visit?  yes  no

Is this an existing NDDDB occurrence?  no  unk.  
Yes, Occ. # \_\_\_\_\_

Collection? If yes: \_\_\_\_\_  
Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Alice Karl

Address: P.O. Box 74006  
Davis, CA 95617

E-mail Address: heliophile@mindspring.com

Phone: (530) 666-9567

#### Plant Information

Phenology: \_\_\_\_\_% vegetative \_\_\_\_\_% flowering \_\_\_\_\_% fruiting

#### Animal Information

1  
# adults # juveniles # larvae # egg masses # unknown  
 wintering  breeding  nesting  rookery  burrow site  other

#### Location Description (please attach map AND/OR fill out your choice of coordinates, below)

East of Desert Center, north of I-10

County: Riverside Landowner / Mgr.: BLM

Quad Name: \_\_\_\_\_ Elevation: \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S GPS Make & Model Garmin Map 76CSx

DATUM: NAD27  NAD83  WGS84  Horizontal Accuracy 3m \_\_\_\_\_ meters/feet

Coordinate System: UTM Zone 10  UTM Zone 11  OR Geographic (Latitude & Longitude)

Coordinates: 0656022E 3731523N

#### Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Adult, perched on Olneya

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population):  Excellent  Good  Fair  Poor

Immediate AND surrounding land use:

Visible disturbances:

Threats:

Comments:

#### Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): \_\_\_\_\_
- Compared with specimen housed at: \_\_\_\_\_
- Compared with photo / drawing in: \_\_\_\_\_
- By another person (name): \_\_\_\_\_
- Other \_\_\_\_\_

#### Photographs: (check one or more)

Slide Print Digital  
Plant / animal     
Habitat     
Diagnostic feature

May we obtain duplicates at our expense? yes  no



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California Dept. of Fish & Wildlife  
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Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work (mm/dd/yyyy): 05052013

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Scientific Name: Lanius ludovicianus

Common Name: Loggerhead shrike

Species Found?  Yes  No If not, why? \_\_\_\_\_  
Total No. Individuals 1 Subsequent Visit?  yes  no  
Is this an existing NDDB occurrence?  yes  no  unk.  
Yes, Occ. # \_\_\_\_\_  
Collection? If yes: \_\_\_\_\_  
Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Alice Karl  
Address: P.O. Box 74006  
Davis, CA 95617  
E-mail Address: heliophile@mindspring.com  
Phone: (530) 666-9567

#### Plant Information

Phenology: \_\_\_\_\_% vegetative \_\_\_\_\_% flowering \_\_\_\_\_% fruiting

#### Animal Information

1  
# adults # juveniles # larvae # egg masses # unknown  
 wintering  breeding  nesting  rookery  burrow site  other

#### Location Description (please attach map AND/OR fill out your choice of coordinates, below)

East of Desert Center, north of I-10

County: Riverside Landowner / Mgr.: BLM  
Quad Name: \_\_\_\_\_ Elevation: \_\_\_\_\_  
T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S  
T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S  
Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_  
GPS Make & Model Garmin Map 76CSx  
Horizontal Accuracy 3m meters/feet  
**DATUM:** NAD27  NAD83  WGS84   
Coordinate System: UTM Zone 10  UTM Zone 11  OR Geographic (Latitude & Longitude)   
Coordinates: 0656039E 3731373N

#### Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

**Animal Behavior** (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):  
(heard)

Please fill out separate form for other rare taxa seen at this site.

**Site Information** Overall site/occurrence quality/viability (site + population):  Excellent  Good  Fair  Poor

Immediate AND surrounding land use:

Visible disturbances:

Threats:

Comments:

#### Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): \_\_\_\_\_  
 Compared with specimen housed at: \_\_\_\_\_  
 Compared with photo / drawing in: \_\_\_\_\_  
 By another person (name): \_\_\_\_\_  
 Other \_\_\_\_\_

**Photographs:** (check one or more) Slide Print Digital  
Plant / animal     
Habitat     
Diagnostic feature

May we obtain duplicates at our expense? yes  no

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Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work (mm/dd/yyyy): 05052013

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: Lanius ludovicianus

Common Name: Loggerhead shrike

Species Found?  Yes  No If not, why? \_\_\_\_\_  
Total No. Individuals 2 Subsequent Visit?  yes  no  
Is this an existing NDDDB occurrence?  yes  no  unk.  
Yes, Occ. # \_\_\_\_\_  
Collection? If yes: \_\_\_\_\_  
Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Alice Karl  
Address: P.O. Box 74006  
Davis, CA 95617  
E-mail Address: heliophile@mindspring.com  
Phone: (530) 666-9567

Plant Information

Phenology: \_\_\_\_\_% vegetative \_\_\_\_\_% flowering \_\_\_\_\_% fruiting

Animal Information

2  
# adults # juveniles # larvae # egg masses # unknown  
 wintering  breeding  nesting  rookery  burrow site  other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

East of Desert Center, north of I-10

County: Riverside Landowner / Mgr.: BLM  
Quad Name: \_\_\_\_\_ Elevation: \_\_\_\_\_  
T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S  Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_  
T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S  GPS Make & Model Garmin Map 76CSx  
**DATUM:** NAD27  NAD83  WGS84  Horizontal Accuracy 3m \_\_\_\_\_ meters/feet  
Coordinate System: UTM Zone 10  UTM Zone 11  OR Geographic (Latitude & Longitude)   
Coordinates: 0655958E 3731052N

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):  
Perched

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population):  Excellent  Good  Fair  Poor

Immediate AND surrounding land use:

Visible disturbances:

Threats:

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): \_\_\_\_\_  
 Compared with specimen housed at: \_\_\_\_\_  
 Compared with photo / drawing in: \_\_\_\_\_  
 By another person (name): \_\_\_\_\_  
 Other: \_\_\_\_\_

Photographs: (check one or more) Slide Print Digital  
Plant / animal     
Habitat     
Diagnostic feature

May we obtain duplicates at our expense? yes  no

DATE 7 April 2013  
TIME: Start 0820  
End 1047

SURVEYORS: Navigator Karl, A.  
GPS P. Frank  
Data \_\_\_\_\_

WEATHER:

	Ta	T <sub>s</sub>	Tg	Cloud Cover	Wind
Start	22.4	24.3	23.5	30% cumu	N-8
End	27.0	30.2	35.8	100% cumo- stratus	N-4

LINEAR I.D. T-Line ROW

Location relative to I-10 N → S side  
Northern UTM 0655935E 3731818 N  
Southern UTM ended @ Red Bluff Substa. N  
(NAD 83)

TOTAL TRANSECT WIDTH 20m (2 people)  
(note FT or M)

Recent Weather: clear, warm

GENERAL SITE DESCRIPTION:

VEGETATION SHRUB LAYER AND BUNCH GRASSES)

Aspect Dominants

LATR AMPDU OLTE

Common Species

OPEC 1H43A

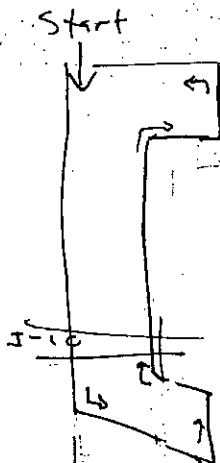
Occasional Species

PARFLO (the big wash only/mostly)

Justicia BEJU

% Cover 7%

Avg. Height of Dominant Shrub Species LATR - ~1 to 1.6m



UNDERSTORY

Abundant Species Dinene, CHACAR, CRAN, EREROT, EURO, Pecto spp

MAL PKOV LUPARI (washes) CNBR CHR1 ++

Exotics (Map concentrations and describe here relative to population size and geographic breadth.)

Not obvious

TOPOGRAPHY

Landform lower bajada

Drainage Type

Sheet flow mostly w/ good woodland. Near fwy & south of fwy, the washes (all are separate) (no sheet) and ~1-1.5m deep. One wash is ~5m deep, crossing to S of fwy east of the route, the elevation (state meters or feet) on S side of fwy crosses ROW

680'

SUBSTRATE

Color Pale tan → dark, mottled grays

Coarse Particles (Type, % Cover) In sheet flow is rilled lg. gravel in temperated w/ 90-100% fine & very fine gravel; scattered coarse gravel.

Soil Texture and Consistence soft fine sandy loam.

well-developed, mod. broad (10+ m) patches, mostly in S end near fwy.

PRESENCE OF PREDATORS: Ravens - # Detected 0

Coyotes - # Detected 0

Scat? 0

Scat Piles \_\_\_\_\_

# Nests \_\_\_\_\_

HUMAN-RELATED DISTURBANCES (Onsite and Adjacent)

Current: T-line being built (Drs. Sunlight) & residence (part-time, trailer) # NNE of NE corner of ROW. One dirt rd (not graded) runs E-W just N of ROW. Also, #RBS @ south end of ROW. I-10 - Old - 2 very faint old roads cross the ROW and deep wash near I-10.

SITE PICTURE/Photographer KARL

A - Form  (= Pic 1)

B - From end (identify) See diagram for habitat.

C - From other end (identify)

D - Other \_\_\_\_\_



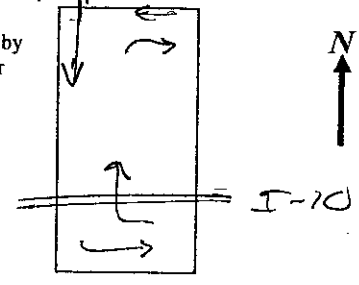
COMMENTS

No bat sign in culvert - Culvert is entirely a cement box, ~200' long



DATE 7 April 2013  
LINEAR OR OTHER I.D. T-line  
MAP LEGEND:

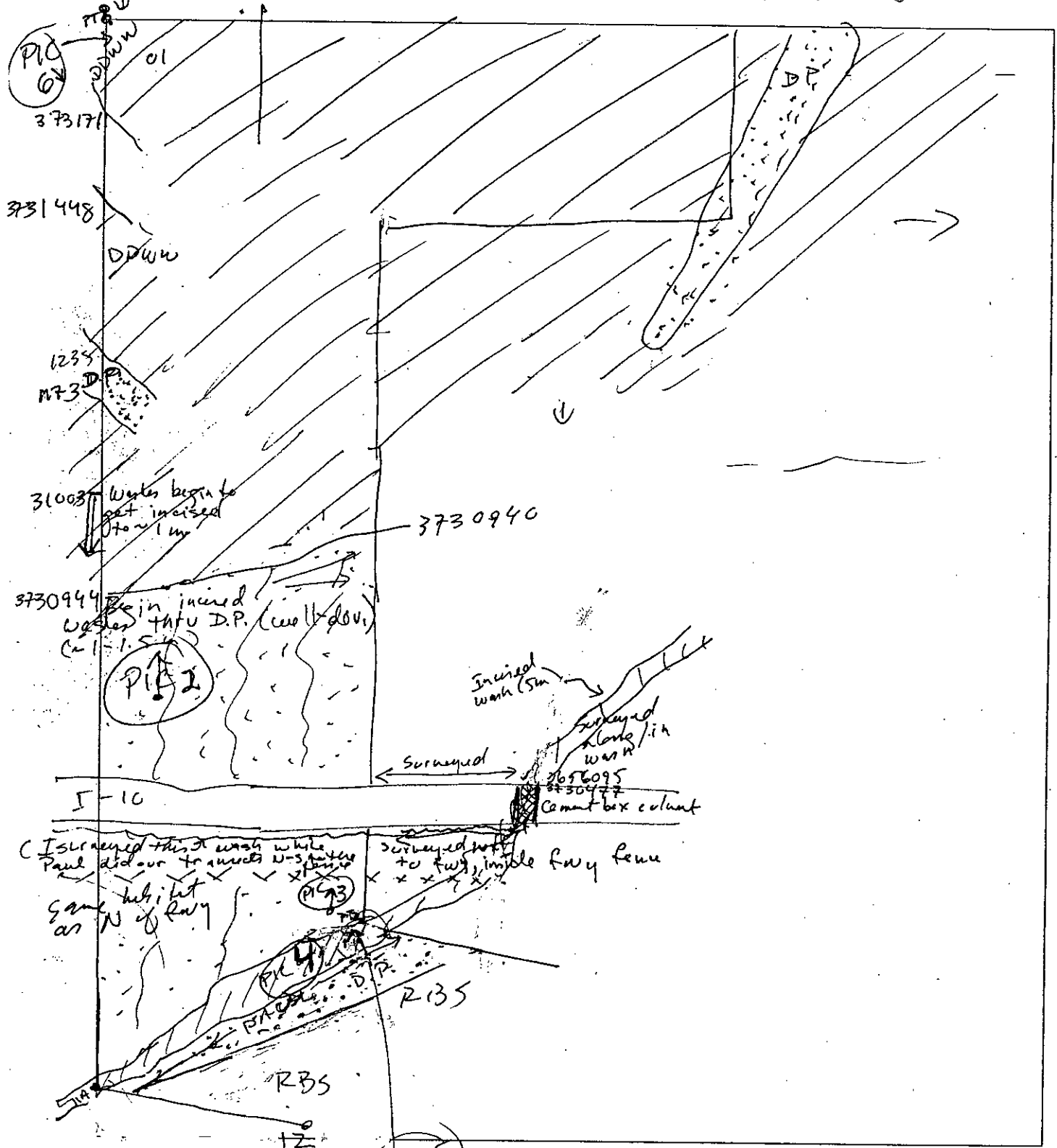
Transect: show start, and end by direction and transect number or ITM



/// = DDWW  
::: = Well-developed desert pumt.

Unmaintained dirt rd

Residence



(I surveyed this wash while Paul did our transects N-S)

Surveyed with to fwy, imble fwy fence

PIC 5

DATE 07 APR 2013  
TIME: Start 18:25  
End 19:20  
WEATHER:

SURVEYORS: Navigator PAUL FRANK  
GPS  
Data

	Ta		Tg	Cloud Cover	Wind
Start	29.5	36	32	40% thin	2-4 NNE
End	29	29.5	30	20% thin	3-6 W

LINEAR I.D. Buffer Transect 200 m WEST EAST  
Location relative to I-10 START - JUST North, END to North  
Northern UTM 0655951 E 3732019 N  
Southern UTM 0656264 E 3736467 N  
(NAD 83)  
TOTAL TRANSECT WIDTH 10m  
(note FT or M)

Recent Weather:

GENERAL SITE DESCRIPTION:  
VEGETATION SHRUB LAYER AND BUNCH GRASSES)

Aspect Dominants

Common Species

Occasional Species

% Cover  
Avg. Height of Dominant Shrub Species

UNDERSTORY

Abundant Species

Exotics (Map concentrations and describe here relative to population size and geographic breadth.)

TOPOGRAPHY

Landform

Drainage Type

Elevation (state meters or feet)

SUBSTRATE

Color  
Coarse Particles (Type, % Cover)

Soil Texture and Consistence

PRESENCE OF PREDATORS: Ravens - # Detected

Coyotes - # Detected Scat? yes Scat Piles # Nests

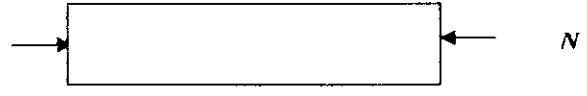
HUMAN-RELATED DISTURBANCES (Onsite and Adjacent)

SITE PICTURE: Photographer T. FRANK

- A - Form  - START (516 fence) → 360°
- B - From end (identify) →
- C - From other end (identify)
- D - Other

COMMENTS

↑  
SAME AS  
Buffer Transect  
200 m west





DATE 07 Apr 2013  
LINEAR OR OTHER I.D. 200 E N y I-10  
MAP LEGEND:

Transects: show start, and end by direction and transect number or ITM



0655951  
3732.019  
END

mostly Desert Pavement

BRIDGED sheet wash

STRUCTURES PRIVACY

← 345m →  
← 335m →

↑ 440m ↓

ROW

Mix D. pavement

old rd

very large incised wash

Desert Pavement

BRIDGED SHEET WASH - G channels - Terraces with rubble & boulders



good pavement  
B1% C1020  
G 35% F 35%

incised wash with HALRIC & BRATOR

↑ 1330m 1150m ↓

Desert Pavement  
Heavy (w/SS) Truck Impact  
small CP's  
SM incised wash

Desert Pavement  
dogpad/mud lug  
To Rolling gravelled  
SURFACE

very large incised wash

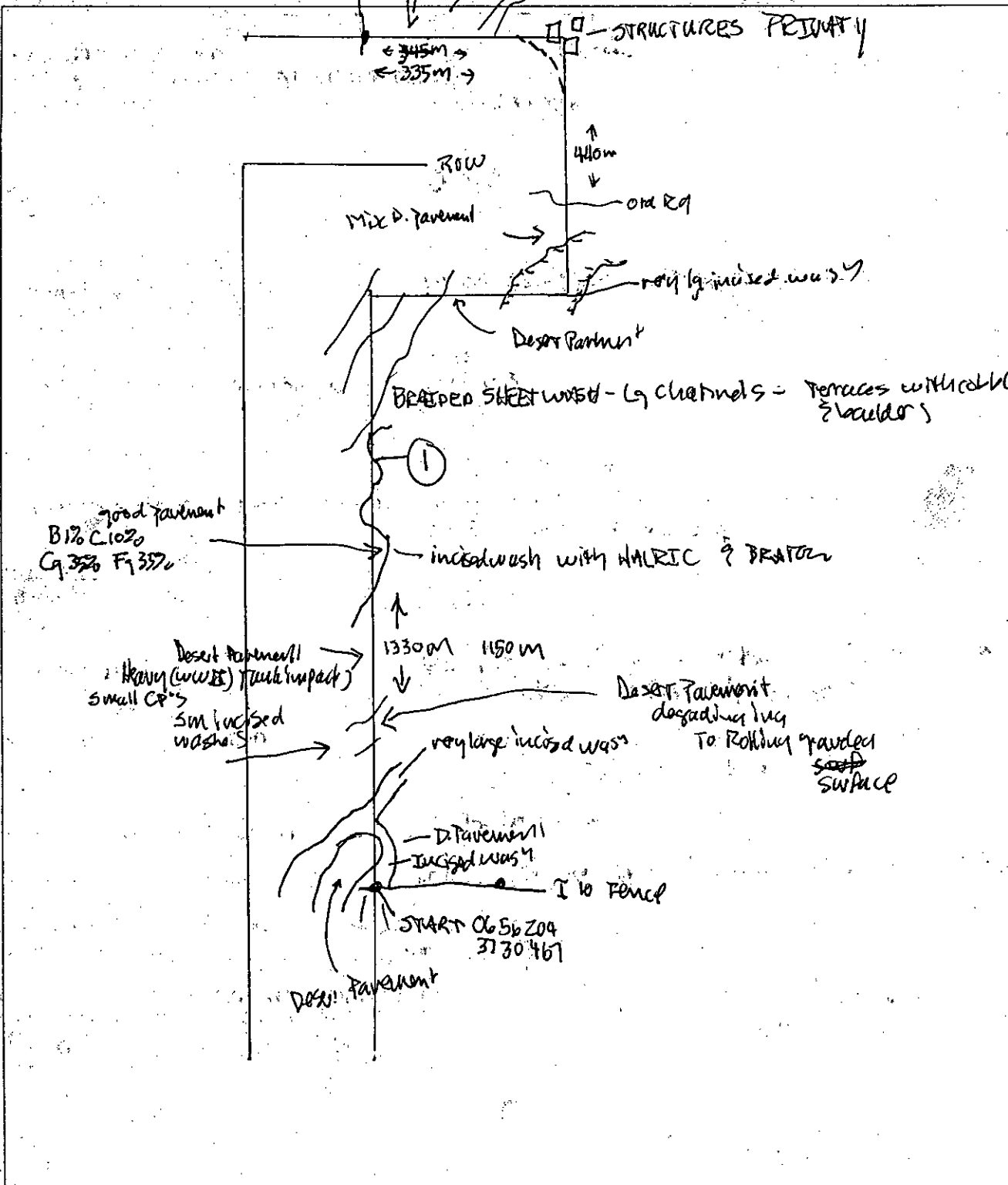
D Pavement  
incised wash

I 10 Fence

START 0656204  
3730467

Desert Pavement

AM1036





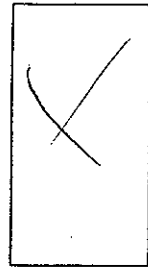


DATE 24 April 2013

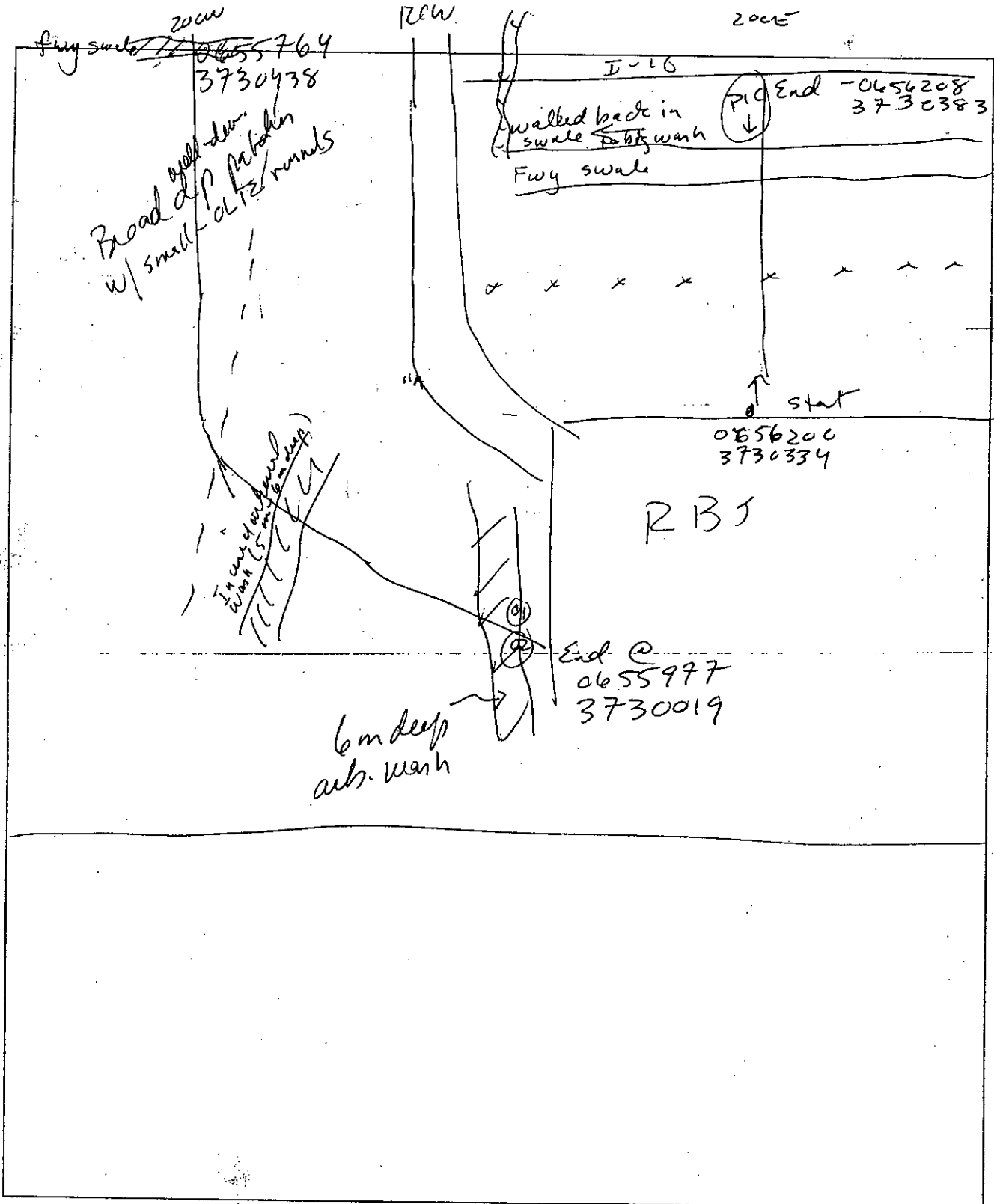
LINEAR OR OTHER I.D. 200m buffer S of I-16, W & E

MAP LEGEND:

Transect: s: show start, and end by direction and transect number or I/TM



Time -  
East - 1455 - 1459  
West - 1556 - 1633



DATE 7 April 2013  
TIME: Start 1240  
End 1413

SURVEYORS: Navigator A. Karl  
GPS \_\_\_\_\_  
Data \_\_\_\_\_

WEATHER:

	Ta	Ts	Tg	Cloud Cover	Wind
Start	29.4	30.6	35.4	100% cirro- stratus	N 5-7
End	32.1	32.4	42.6	100% cirro- stratus	N 3-4

Recent Weather: Clear, warm

LINEAR I.D. T-line - 400m ~~201~~ (buffer)

Location relative to I-10 N+S  
Northern UTM 0656335 E 3731795 N  
Southern UTM 0656401 E 3730301 N  
(NAD 83)  
TOTAL TRANSECT WIDTH 10 m  
(note FT or M)

GENERAL SITE DESCRIPTION:  
VEGETATION SHRUB LAYER AND BUNCH GRASSES)

Aspect Dominants

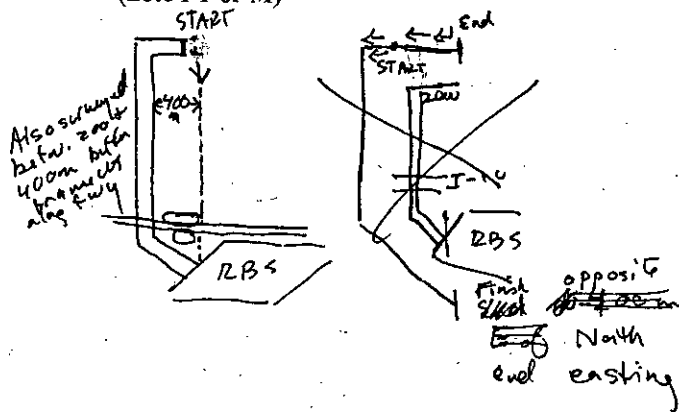
Common Species

Occasional Species

% Cover

Avg. Height of Dominant Shrub Species

*Same as ROW  
exc. as  
noted*



UNDERSTORY

Abundant Species

Exotics (Map concentrations and describe here relative to population size and geographic breadth.)

TOPOGRAPHY

Landform

Drainage Type

Elevation (state meters or feet)

*Near fwy, on north side, is very light sheet w/ small OLTE in the more defined channels. w/in ~300m (N) of fwy, the washes are broad, gently-sloped, & deep ~6m for the larger ones.*

SUBSTRATE

Color

Coarse Particles (Type, % Cover)

Soil Texture and Consistence

PRESENCE OF PREDATORS: Ravens - # Detected 0

# Nests

Coyotes - # Detected ✓

Scat? ✓

(1) Scat Piles

*Many tracks in the big washes - too obliterated to id. but stride length suggests mostly Coyote*

HUMAN-RELATED DISTURBANCES (Onsite and Adjacent)

*Same as ROW. Many old tracks on DP.*

*See reverse*

SITE PICTURE: Photographer KARL

A - Form

B - From end (identify) *At edge of lg. wash in PDWW*

C - From other end (identify) *Broad dip patches w/ interspersed arb washes.*

D - Other

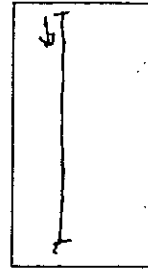
COMMENTS

*No bat sign in culvert.*



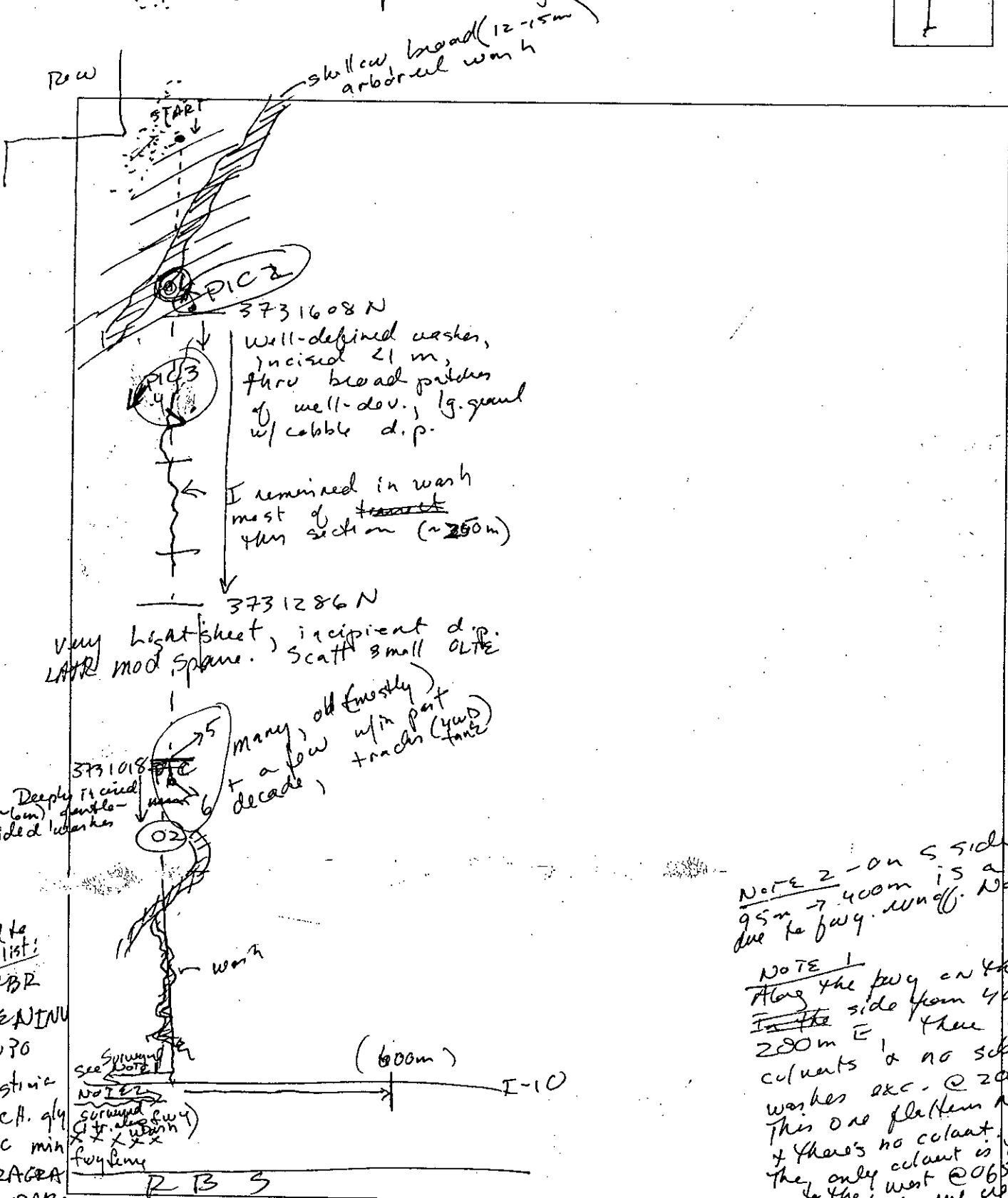
DATE 7 April 2013  
LINEAR OR OTHER I.D. T line 400 E Buffer  
MAP LEGEND:

Transects: show start, and end by direction and transect number or I/TM



/// = DDWW  
... = well-developed des. point.

see reverse side



NOTE 2 - on S side from 95m - 400m is a wash due to fug. runoff. No culverts

NOTE 1 - Along the fug on the W side from 400 to 200m E there are washes etc. @ 200m. This one flatland near fug + there's no culvert. The only culvert is like the one @ 0656090 to the west we crossed this morning (= 95m E of the ROW)

- add to PPI list:
- WBR
- MEANIN
- EUPO
- ustria
- sch. gly
- isc min
- CRAGRA
- LUPAR
- GERLAN
- CAMCLA
- OCARAM

- ABDEN
- KWEAND
- OLTE

- PHACRE MIN
- DITLAN
- DITNEO

- ENFA
- MARPAR
- Boeraw (control)

DATE 7 April 2013  
 TIME: Start 1424  
 End 1521

SURVEYORS: Navigator A. Karl  
 GPS \_\_\_\_\_  
 Data \_\_\_\_\_

WEATHER:

	Ta	Tg	Cloud Cover	Wind
Start	32.1	32.6	42.4	100% cumostat N 3-4
End	33.9	35.2	40.8	100% cumostat N 4-5

LINEAR I.D. T-Line 600 m 201 (buffer)

Location relative to I-10 N+S  
 Northern UTM 0656590 E 3731832 N  
 Southern UTM 0656597 E 3730255 N  
 (NAD 83)

TOTAL TRANSECT WIDTH 104  
 (note FT or M)

Recent Weather: \_\_\_\_\_

GENERAL SITE DESCRIPTION:

VEGETATION SHRUB LAYER AND BUNCH GRASSES)

Aspect Dominants \_\_\_\_\_

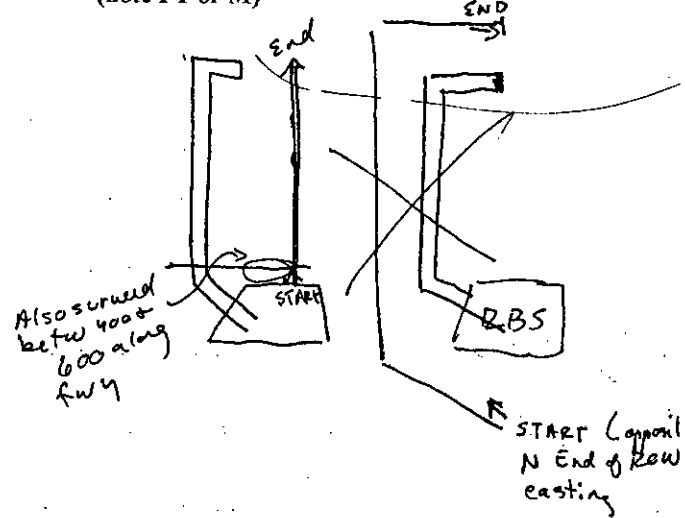
Common Species \_\_\_\_\_

Occasional Species \_\_\_\_\_

% Cover \_\_\_\_\_

Avg. Height of Dominant Shrub Species \_\_\_\_\_

*Same as ROW +  
 400 exc. as  
 noted*



UNDERSTORY

Abundant Species \_\_\_\_\_

Exotics (Map concentrations and describe here relative to population size and geographic breadth.)

TOPOGRAPHY

Landform \_\_\_\_\_

Drainage Type Not much sheet + no DDWW. Shallowly inclined

rancho washes interspersed w/ small d.p. patches +  
incipient d.p. at N end, the washes carry a lot of  
 Elevation (state meters or feet) water + air broad w/ lg. trees (OUT)

SUBSTRATE

Color \_\_\_\_\_

Coarse Particles (Type, % Cover) \_\_\_\_\_

Soil Texture and Consistence \_\_\_\_\_

Very large patches of dark well-dev. d.p.  
S. end is small patches + non-d.p.  
betw washes

PRESENCE OF PREDATORS: Ravens - # Detected \_\_\_\_\_

Coyotes - # Detected \_\_\_\_\_

Scat? \_\_\_\_\_

Scat Piles \_\_\_\_\_

# Nests \_\_\_\_\_

HUMAN-RELATED DISTURBANCES (Onsite and Adjacent)

Many old tracks (YWD) on D.P. Same as ROW.

SITE PICTURE: Photographer \_\_\_\_\_

KARL

A - Form

B - From end (identify) See Habitat map

C - From other end (identify) \_\_\_\_\_

D - Other \_\_\_\_\_



COMMENTS

No bat sign obs. in culverts

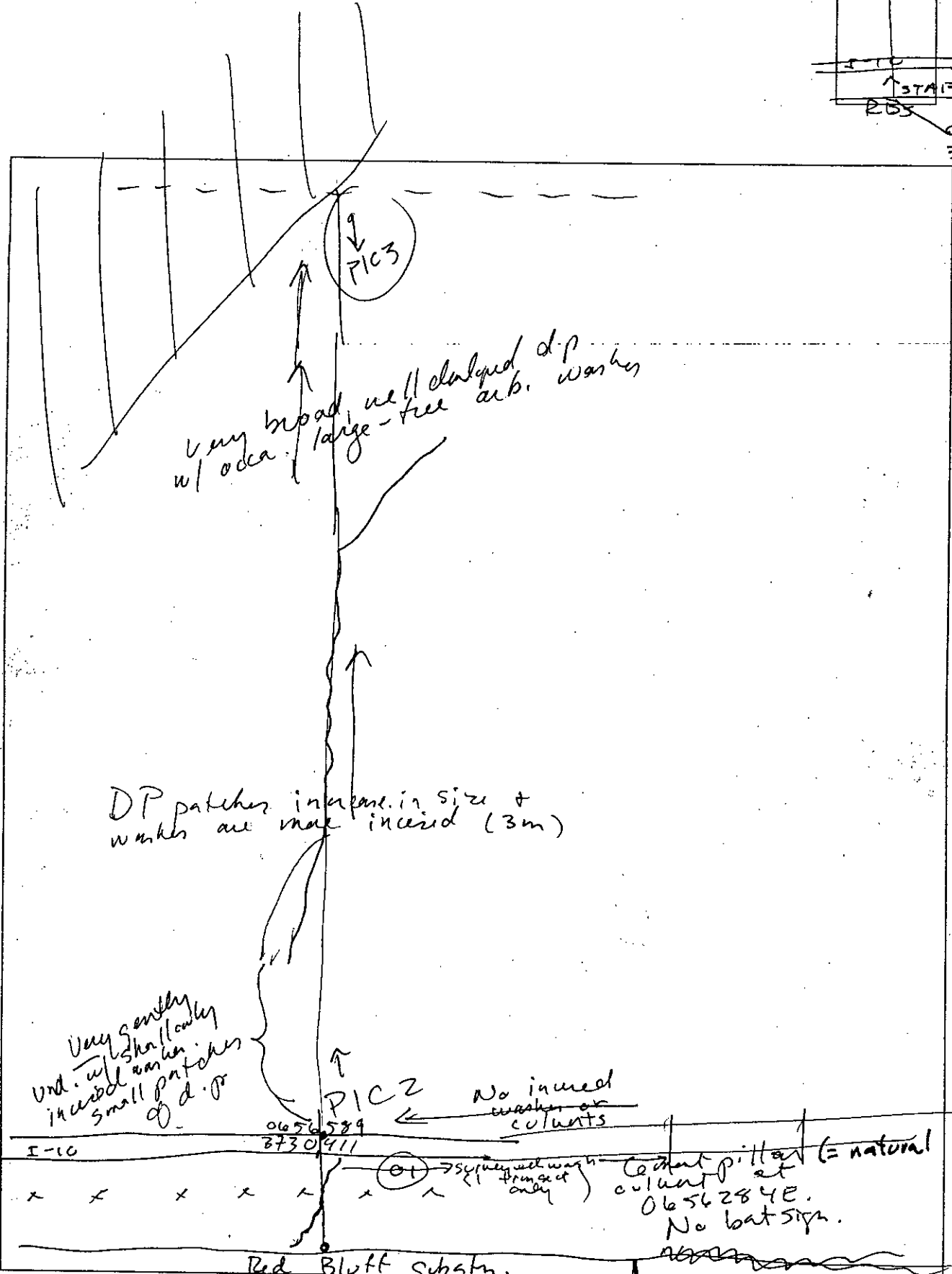
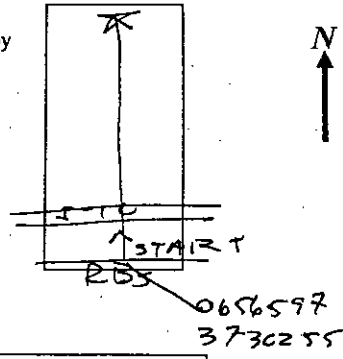


DATE 7 April 2013

LINEAR OR OTHER I.D. T Line 600E Buffer

MAP LEGEND:

Transects: show start, and end by direction and transect number or ITM



Fwy 4

- CHOCOR
- HYPENMO
- HYSA
- Positiv
- CRNE
- SP AM
- LUP BIC
- LELA
- PHATAW



DATE 07 APR 2013  
 TIME: Start 14:45  
 End 16:46

SURVEYORS: Navigator PAUL FRANK  
 GPS \_\_\_\_\_  
 Data \_\_\_\_\_

WEATHER:

	Ta		Tg	Cloud Cover	Wind
Start	30	32.5	33	95 Thin	7-10 NORTN
End	31.5	32	39	80 Thin	L <sup>W</sup>

LINEAR I.D. Buffer Transect 400 m west  
 Location relative to I-10 - START south of / END North of  
 END Northern UTM 6656314 E 3732227 N  
 START Southern UTM 0656201 E 3729785 N  
 (NAD 83)  
 TOTAL TRANSECT WIDTH 10 M  
 (note FT or M)

Recent Weather: \_\_\_\_\_

GENERAL SITE DESCRIPTION:  
 VEGETATION SHRUB LAYER AND BUNCH GRASSES)

Aspect Dominants \_\_\_\_\_

SAME AS 600 West

Common Species \_\_\_\_\_

Occasional Species \_\_\_\_\_

% Cover \_\_\_\_\_  
 Avg. Height of Dominant Shrub Species \_\_\_\_\_

UNDERSTORY

Abundant Species \_\_\_\_\_

Exotics (Map concentrations and describe here relative to population size and geographic breadth.) \_\_\_\_\_

TOPOGRAPHY

Landform \_\_\_\_\_

Drainage Type \_\_\_\_\_

Elevation (state meters or feet) \_\_\_\_\_

SUBSTRATE

Color \_\_\_\_\_  
 Coarse Particles (Type, % Cover) \_\_\_\_\_

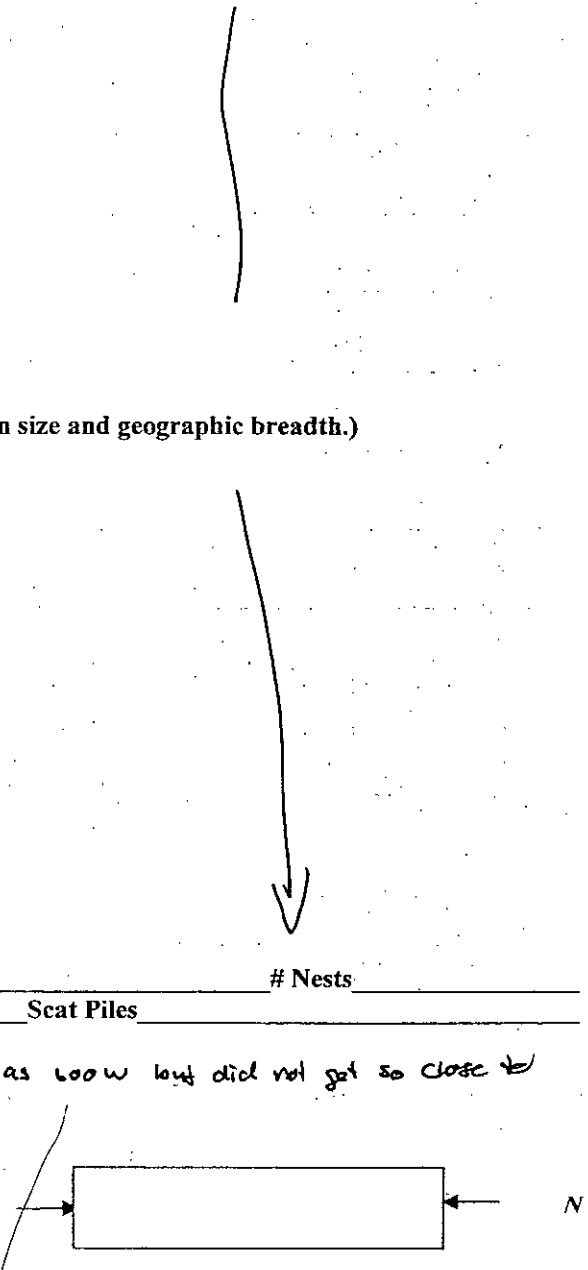
Soil Texture and Consistence \_\_\_\_\_

PRESENCE OF PREDATORS: Ravens - # Detected 1 # Nests \_\_\_\_\_  
 Coyotes - # Detected could disprove Scat? yes Scat Piles \_\_\_\_\_

HUMAN-RELATED DISTURBANCES (Onsite and Adjacent) - Same as 600 w but did not get so close to FPL; Doves Palo Verde WINDS

SITE PICTURE: Photographer P. FRANK  
 A - Form   
 B - From end (identify) - START (see map) → 2700  
 C - From other end (identify) - Edge of private property → 2700 see map  
 D - Other \_\_\_\_\_

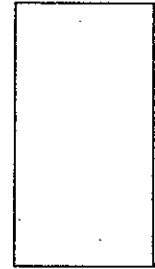
COMMENTS \_\_\_\_\_



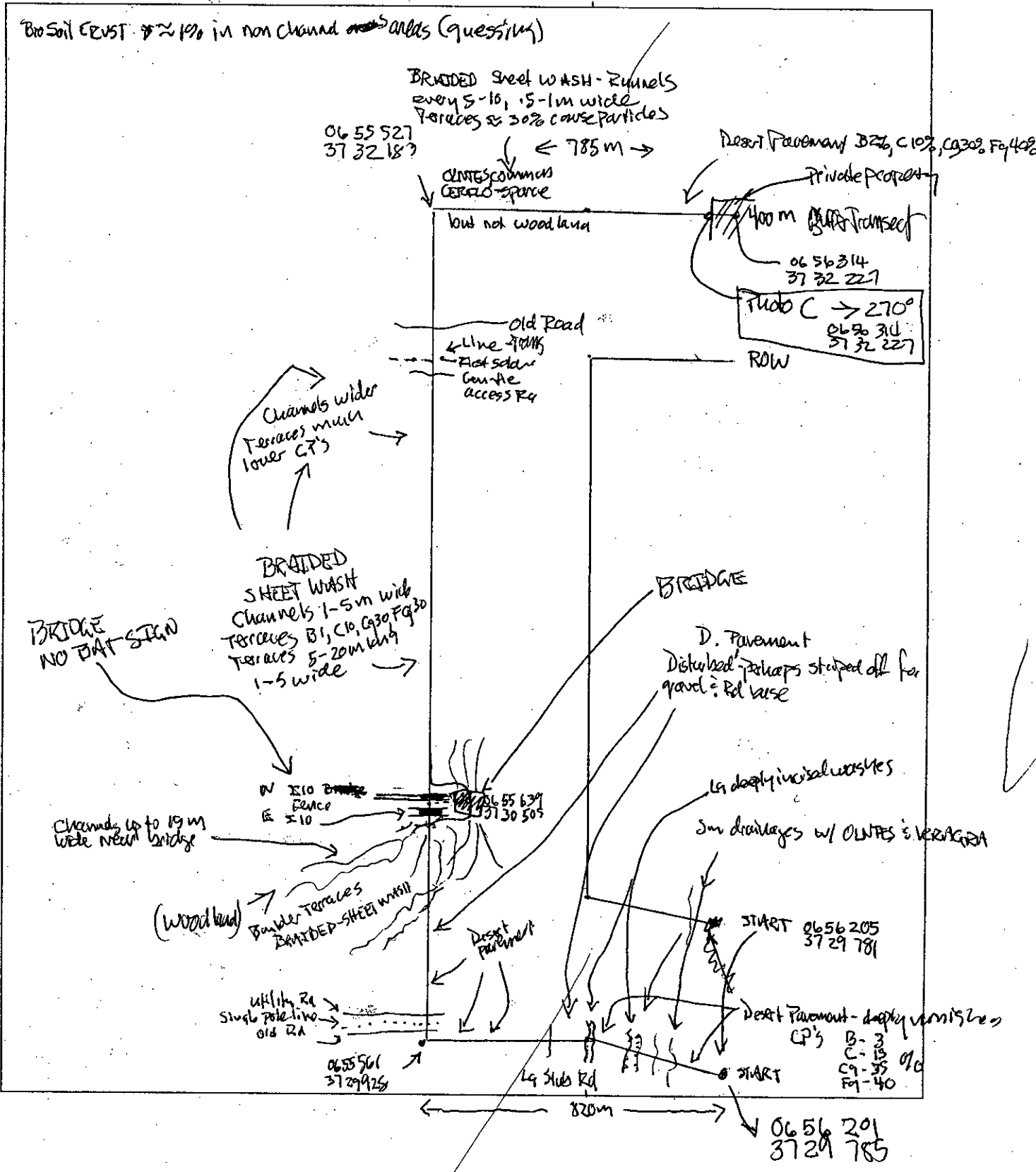


DATE 07 APR 2013  
LINEAR OR OTHER I.D. Buffer/Transect 400m west  
MAP LEGEND:

Transects: show start, and end by direction and transect number or ITTM



28 112 26



DATE 07 APR 2013  
 TIME: Start 12:20  
 End 14:45

SURVEYORS: Navigator PAUL FRANK  
 GPS \_\_\_\_\_  
 Data \_\_\_\_\_  
 LINEAR I.D. Buffer Transsect 600m west

	Ta	Tg	Cloud Cover	Wind
Start	29.4	30.6	85% thin	5-7 NORTH
End	30.0	32.5	95% thin	7-10 NORTH

Location relative to I-10 START is NORTH, End is SOUTH  
 START Northern UTM 0656 331 E 37 32 425 N  
 END Southern UTM 0656 202 E 37 29 590 N  
 (NAD 83)  
 TOTAL TRANSECT WIDTH 10  
 (note FT or M)

Recent Weather: Clear & HOT

GENERAL SITE DESCRIPTION:  
 VEGETATION SHRUB LAYER AND BUNCH GRASSES)

Aspect Dominants

LARTR, AMBDM

Common Species

OLNTES

Occasional Species

CYLECH, PSOSCH, KRACJA, FERCYL, AMBSAL, CERFLO, ENCRAR  
 (BESJUC, ACAGRE, - 1g was south of E 10)

% Cover \_\_\_\_\_

8-9%

Avg. Height of Dominant Shrub Species

1.7 ± 0.4

UNDERSTORY

Abundant Species

CRYALU, CHA, CHOBRE, (cham-pah - in south)

Exotics (Map concentrations and describe here relative to population size and geographic breadth.)

BRASOR - lightly scattered

TOPOGRAPHY

Landform

BAJADN

Drainage Type

lg braided system, sheet wash, Ponds - all sizes in size of  
 in the system

Elevation (state meters or feet)

200m

SUBSTRATE

Color

Fines Tan, CP's light → dark gray (crank) some orange r. white  
 various - % 20% of surface in north - mostly gravel  
 up to 80% - sand - many boulders - see map

Coarse Particles (Type, % Cover)

Soil Texture and Consistence

various - drainages soft sandy - non drainages sticky mud - sandy loamy

PRESENCE OF PREDATORS: Ravens - # Detected \_\_\_\_\_ # Nests \_\_\_\_\_

Coyotes - # Detected \_\_\_\_\_

Scat? yes

Scat Piles \_\_\_\_\_

HUMAN-RELATED DISTURBANCES (Onsite and Adjacent) - wall ran tank tracks throughout on dune surfaces - fire transsect  
 crossed & parallel to desert sunlight path - then cross I 10 and comes close to FPL & Devos - Palovele lives - ends near  
 g. wall of new and massive transsect station - water born trash throughout.

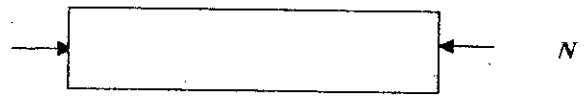
SITE PICTURE: Photographer P. FRANK

A - Form

B - From end (identify) = START (see map) → 270°

C - From other end (identify) - see map → 360°

D - Other \_\_\_\_\_



COMMENTS





DATE 29 April 2013

TIME: Start \_\_\_\_\_  
 End \_\_\_\_\_

Paul's  
Beta Bridges

SURVEYORS: Navigator Karl  
 GPS \_\_\_\_\_  
 Data \_\_\_\_\_

WEATHER:

	Ta	Tg	Cloud Cover	Wind
Start				
End				

LINEAR I.D. \_\_\_\_\_

Location relative to I-10 \_\_\_\_\_  
 Northern UTM \_\_\_\_\_ E \_\_\_\_\_ N \_\_\_\_\_  
 Southern UTM \_\_\_\_\_ E \_\_\_\_\_ N \_\_\_\_\_  
 (NAD 83)

TOTAL TRANSECT WIDTH \_\_\_\_\_  
 (note FT or M)

Recent Weather: \_\_\_\_\_

GENERAL SITE DESCRIPTION:  
 VEGETATION SHRUB LAYER AND BUNCH GRASSES)

Aspect Dominants \_\_\_\_\_

Common Species \_\_\_\_\_

Occasional Species \_\_\_\_\_

% Cover \_\_\_\_\_

Avg. Height of Dominant Shrub Species \_\_\_\_\_

(= "Rollie Ditch")  
Bridge A - 2 cement pillar  
 spans over wash, Hwy.  
 lanes separated by ~100'  
 of wash (see pic.)  
 Sand at bottom. BETU, JUSAE  
ITUSA. Wash is ~50' wide  
 No evidence of bats; no  
 foot-tracks or sign.

UNDERSTORY

Abundant Species \_\_\_\_\_

Exotics (Map concentrations and describe here relative to population size and geographic breadth.)

TOPOGRAPHY

Landform \_\_\_\_\_

Drainage Type \_\_\_\_\_

Elevation (state meters or feet) \_\_\_\_\_

SUBSTRATE

Color \_\_\_\_\_

Coarse Particles (Type, % Cover) \_\_\_\_\_

Soil Texture and Consistence \_\_\_\_\_

"Bridge B" - No bridge or  
 wash under Hwy. There  
 was a wash but ~~the~~ the  
PICS water's been cut off. All  
 OLTE dead downstream.  
 There is a ditch ("Ghost Ditch")  
 at ~ ~~100~~<sup>1044</sup> m W of the Hwy, but  
 nothing @ 600 m 0659901E

PRESENCE OF PREDATORS: Ravens - # Detected \_\_\_\_\_

# Nests \_\_\_\_\_

Coyotes - # Detected \_\_\_\_\_

Scat? \_\_\_\_\_

Scat Piles \_\_\_\_\_

HUMAN-RELATED DISTURBANCES (Onsite and Adjacent)

(Note - I initially misread  
 the location of this "Bridge B"  
 in Paul's notes. He did not  
 have a bridge @ this N  
 location.)

SITE PICTURE: Photographer \_\_\_\_\_

A - Form

B - From end (identify) \_\_\_\_\_

C - From other end (identify) \_\_\_\_\_

D - Other \_\_\_\_\_

COMMENTS

DATE 29 April 2013  
 TIME: Start 1302  
 End 1318

SURVEYORS: Navigator Karl  
 GPS \_\_\_\_\_  
 Data ↓

WEATHER:

	Tg	Tg	Cloud Cover	Wind
Start	38.2	48.4	∅	W-12
End	Same	(16 minutes)		

LINEAR I.D. Gas Line ROW N of I-10

Location relative to I-10 Nath  
 Northern UTM 0669990E 372784N  
 Southern UTM \_\_\_\_\_ E \_\_\_\_\_ N  
 (NAD 83)  
 TOTAL TRANSECT WIDTH 10m x 2 = 20m  
 (note FT or M)

Recent Weather: clear, hot

GENERAL SITE DESCRIPTION:  
 VEGETATION SHRUB LAYER AND BUNCH GRASSES)

Aspect Dominants LATR

Common Species AMOU OLTE 1495A

Occasional Species OPZC

% Cover 13% in open areas; 3-4% in better channels  
 Avg. Height of Dominant Shrub Species  
LATR - 20-6m

UNDERSTORY

Abundant Species CHCA / PLOV / Pectocarya spp  
 Exotics (Map concentrations and describe here relative to population size and geographic breadth.)

∅

TOPOGRAPHY

Landform Bayish

Drainage Type Sheet; very rilled

Elevation (state meters or feet) 650'

SUBSTRATE

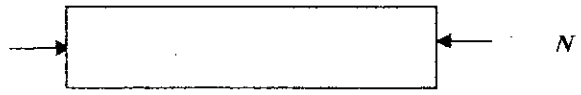
Color mottled gray to nearly black.  
 Coarse Particles (Type, % Cover) Rilled gravel w/ small cobbles in sheeting areas; gravelly, well-developed disjunct for most of transect  
 Soil Texture and Consistence Soft, gravelly, loamy sand

PRESENCE OF PREDATORS: Ravens - # Detected 0 # Nests \_\_\_\_\_  
 Coyotes - # Detected 0 Scat? \_\_\_\_\_ Scat Piles \_\_\_\_\_

HUMAN-RELATED DISTURBANCES (Onsite and Adjacent) I-10, Many old 4WD tracks near freeway (construction of I-10?)

SITE PICTURE: Photographer Karl

- A - Form
  - B - From end (identify)
  - C - From other end (identify)
  - D - Other
- See map on reverse



COMMENTS

OLTE mostly dead or dying due to truncation of sheet flow from I-10





DATE 29 Apr / 2013

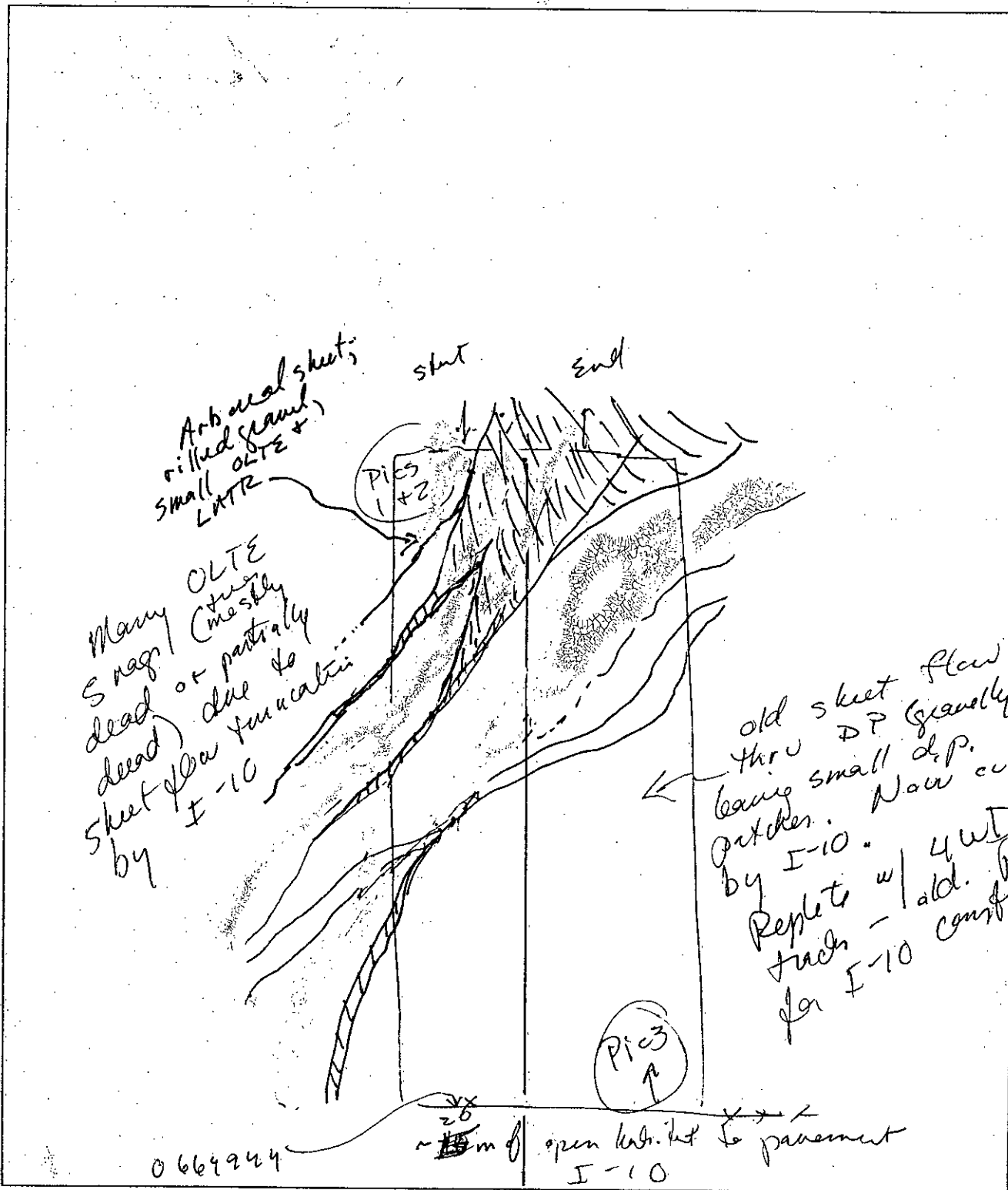
LINEAR OR OTHER I.D. Gas line/linear N of I-10

Transects: show start, and end by direction and transect number or I/TM

MAP LEGEND:



3mm = 100m



0669244

3727663

~26m of open hole to pavement I-10

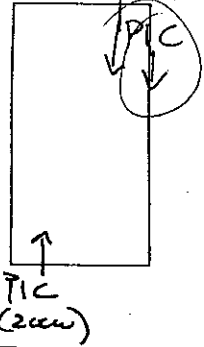


DATE 29 April 2013

LINEAR OR OTHER I.D. Gas line No - 200 E+W

Transect: show start, and end by direction and transect number or ITM

MAP LEGEND:



*old 2-track  
Not used*

200E

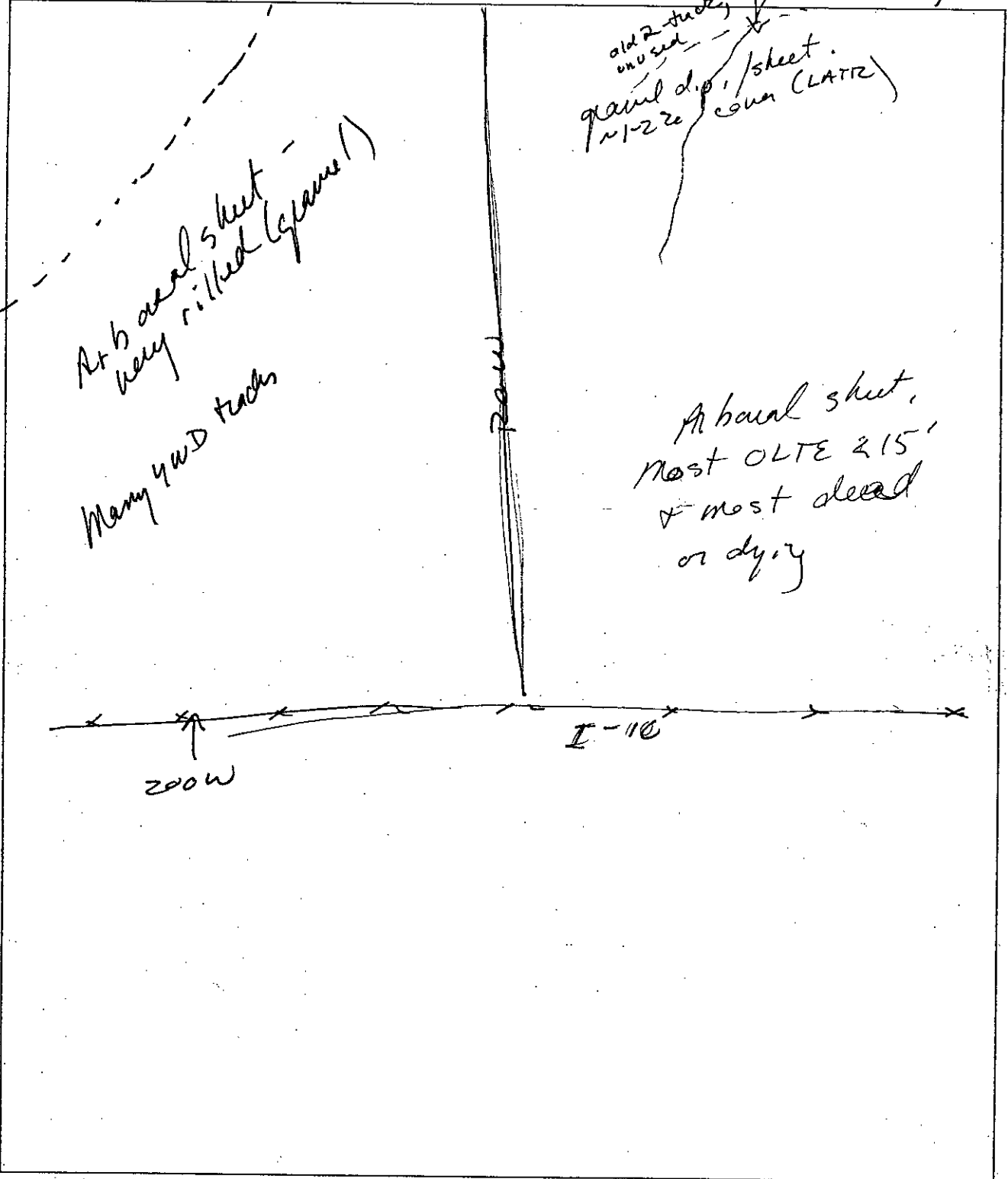
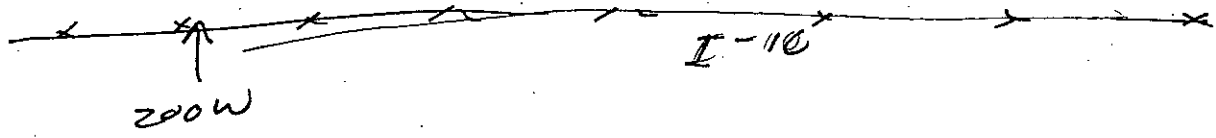
TIC  
(200W)

*old 2-track  
unused  
gravel d.p. / sheet  
1-220  
coun (LATR)*

*Arboreal sheet  
very rilled (gravel)*

*Many YWD tracks*

*Arboreal sheet,  
most OLTE 215'  
& most dead  
or dying*



DATE 29 April 2013  
 TIME: Start 1403-1419 (E 400)  
 End 19 30 April: 0840-0845 (W 400)

SURVEYORS: Navigator Karl  
 GPS \_\_\_\_\_  
 Data \_\_\_\_\_  
 LINEAR I.D. Gas Line 400m E+W

WEATHER:

	Ta	Tg	Cloud Cover	Wind
Start	39.6	51.750	0	W-3
End ST	28.4	31.3	70% cirrus	NE 2

Location relative to I-10 North  
 Northern UTM 0665361 E 37 27872N  
 Southern UTM 0665351 E 3727529N  
 (NAD 83)  
 TOTAL TRANSECT WIDTH 10m  
 (note FT or M)  
 W - Northern - 0664535 3727911  
 Southern - 0664551 3727794

Recent Weather: \_\_\_\_\_

GENERAL SITE DESCRIPTION:  
 VEGETATION SHRUB LAYER AND BUNCH GRASSES)  
 Aspect Dominants \_\_\_\_\_

Common Species \_\_\_\_\_  
 Occasional Species \_\_\_\_\_  
 % Cover \_\_\_\_\_  
 Avg. Height of Dominant Shrub Species \_\_\_\_\_

400E -  
 Same as ROW exc. one  
 entire area (near I-10)  
 is shallow sheet dominated  
 by LATR (< 1-2 & cover)  
 400W - All is OLTE sheet on  
 rilled gravel (same as that  
 part of the ROW)

UNDERSTORY  
 Abundant Species \_\_\_\_\_  
 Exotics (Map concentrations and describe here relative to population size and geographic breadth.) \_\_\_\_\_

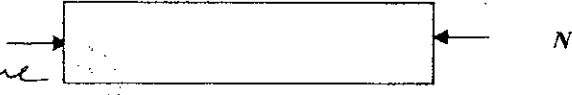
TOPOGRAPHY  
 Landform \_\_\_\_\_  
 Drainage Type \_\_\_\_\_  
 Elevation (state meters or feet) \_\_\_\_\_

SUBSTRATE  
 Color \_\_\_\_\_  
 Coarse Particles (Type, % Cover) \_\_\_\_\_  
 Soil Texture and Consistence \_\_\_\_\_

PRESENCE OF PREDATORS: Ravens - # Detected 0 # Nests \_\_\_\_\_  
 Coyotes - # Detected 0 Scat? \_\_\_\_\_ Scat Piles \_\_\_\_\_

HUMAN-RELATED DISTURBANCES (Onsite and Adjacent) See ROW  
Add 2-track @ N end (project boundary) of 400E  
16' kv line @ N boundary of 400W

SITE PICTURE: Photographer Karl  
 A - Form   
 B - From end (identify) \_\_\_\_\_  
 C - From other end (identify) \_\_\_\_\_  
 D - Other \_\_\_\_\_



COMMENTS \_\_\_\_\_

4/29  
 342  
 831  
 4.20

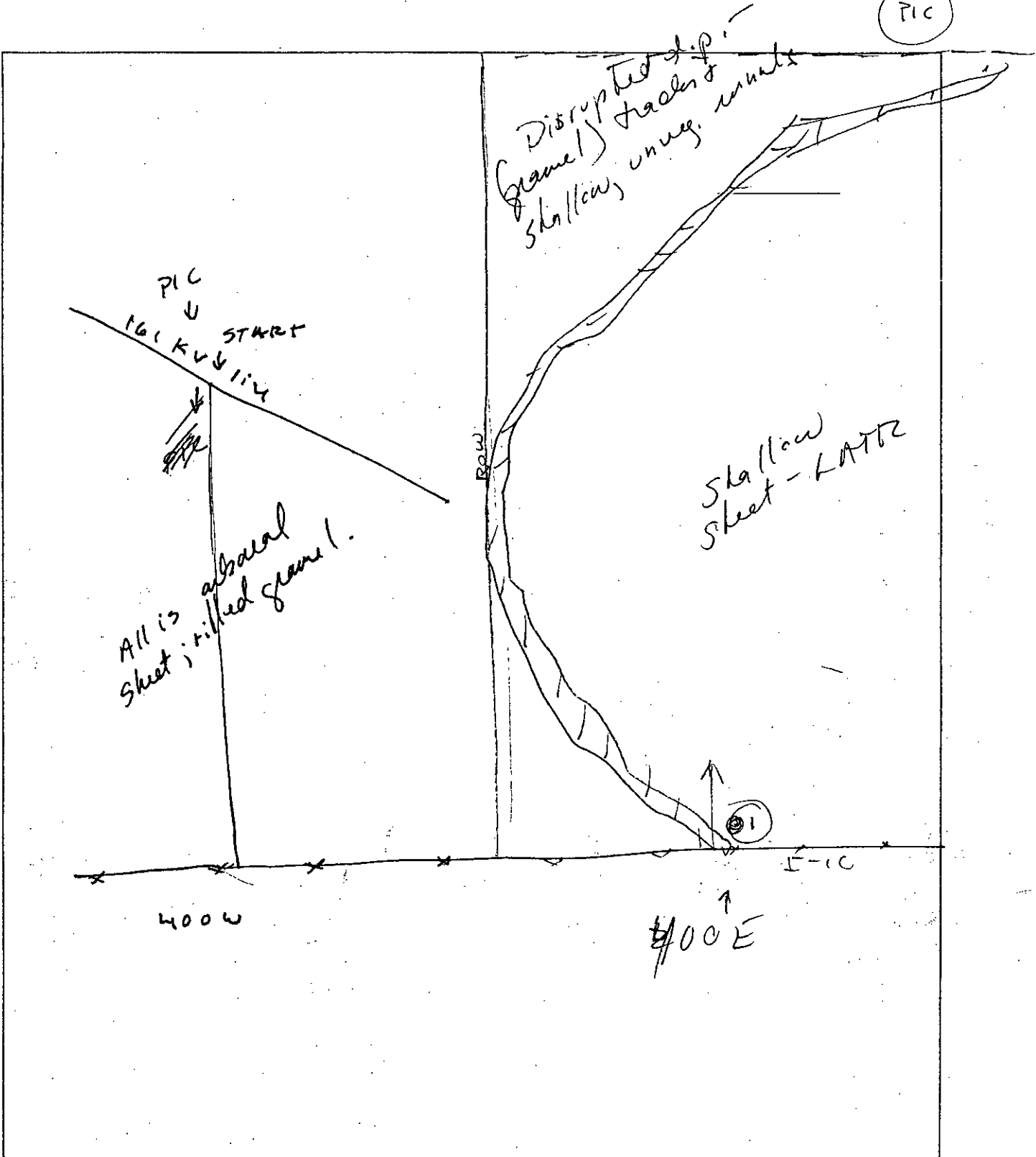
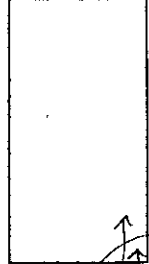


DATE 29 April 2013

LINEAR OR OTHER I.D. Can Line North 400

MAP LEGEND:

Transect,s: show start, and end by direction and transect number or ITM



DATE 29 April 2013  
 TIME: Start 1428-1433  
 End 0934-0952

E 600

SURVEYORS: Navigator Karl  
 GPS \_\_\_\_\_  
 Data \_\_\_\_\_  
 LINEAR I.D. Gas Line 600 m E & W

WEATHER:

	T <sub>s</sub>	T <sub>g</sub>	Cloud Cover	Wind
Start 600 E	40.9	>50	0	E0-3
End End	39.6	40.6	65% cumulus	W 3

Location relative to I-10 North  
 E Northern UTM 0665559E 3727586N  
 Southern UTM 0665548E 3727464N  
 (NAD 83)  
 TOTAL TRANSECT WIDTH 10 m  
 (note FT or M)  
 W - 0664384 3727861 (S)  
0664356 3728220 (N)

Recent Weather: \_\_\_\_\_

GENERAL SITE DESCRIPTION:  
 VEGETATION SHRUB LAYER AND BUNCH GRASSES)

Aspect Dominants  
Bridge - PSOSP1, MYSA  
 Common Species

Bridge - CEFL  
 Occasional Species

% Cover \_\_\_\_\_  
 Avg. Height of Dominant Shrub Species \_\_\_\_\_

UNDERSTORY 600W - OLTE - 20' LAFFR - 1.1 m  
 Abundant Species

Exotics (Map concentrations and describe here relative to population size and geographic breadth.)

TOPOGRAPHY  
 Landform

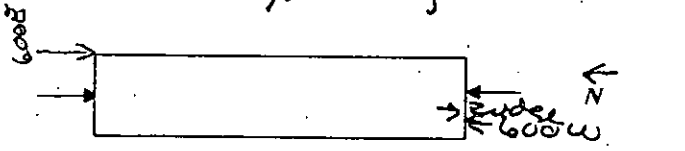
Drainage Type E 600 - All sheet, d.p.  
 Elevation (state meters or feet) w 600 - same

SUBSTRATE  
 Color \_\_\_\_\_  
 Coarse Particles (Type, % Cover) Rest of site is d.p. w/ shallow runnels  
 Soil Texture and Consistence Bridge - soft coarse sand

PRESENCE OF PREDATORS: Ravens - # Detected 0 but tracks under bridge  
 Coyotes - # Detected 0 Scat? 0 Scat Piles \_\_\_\_\_ # Nests 0

HUMAN-RELATED DISTURBANCES (Onsite and Adjacent) 600W - Same as ROW exc. - (61 KV line, w/ no. tracks & disturbs (construc. mostly) along rd.

SITE PICTURE: Photographer Karl  
 A - Form   
 B - From end (identify) 600E from N end to S  
 C - From other end (identify) 600W, S to N  
 D - Other Bridge



COMMENTS Bridge - ~~map~~ many rodent tracks. No deer, tort, coyote. Very sandy between W-E lines - tracks easy to see. No bat sign.

*600E ~~is the same~~  
 Roughly the same as ROW exc. as noted for bridge. otherwise is all arboreal like ROW but quantity (see notes)*



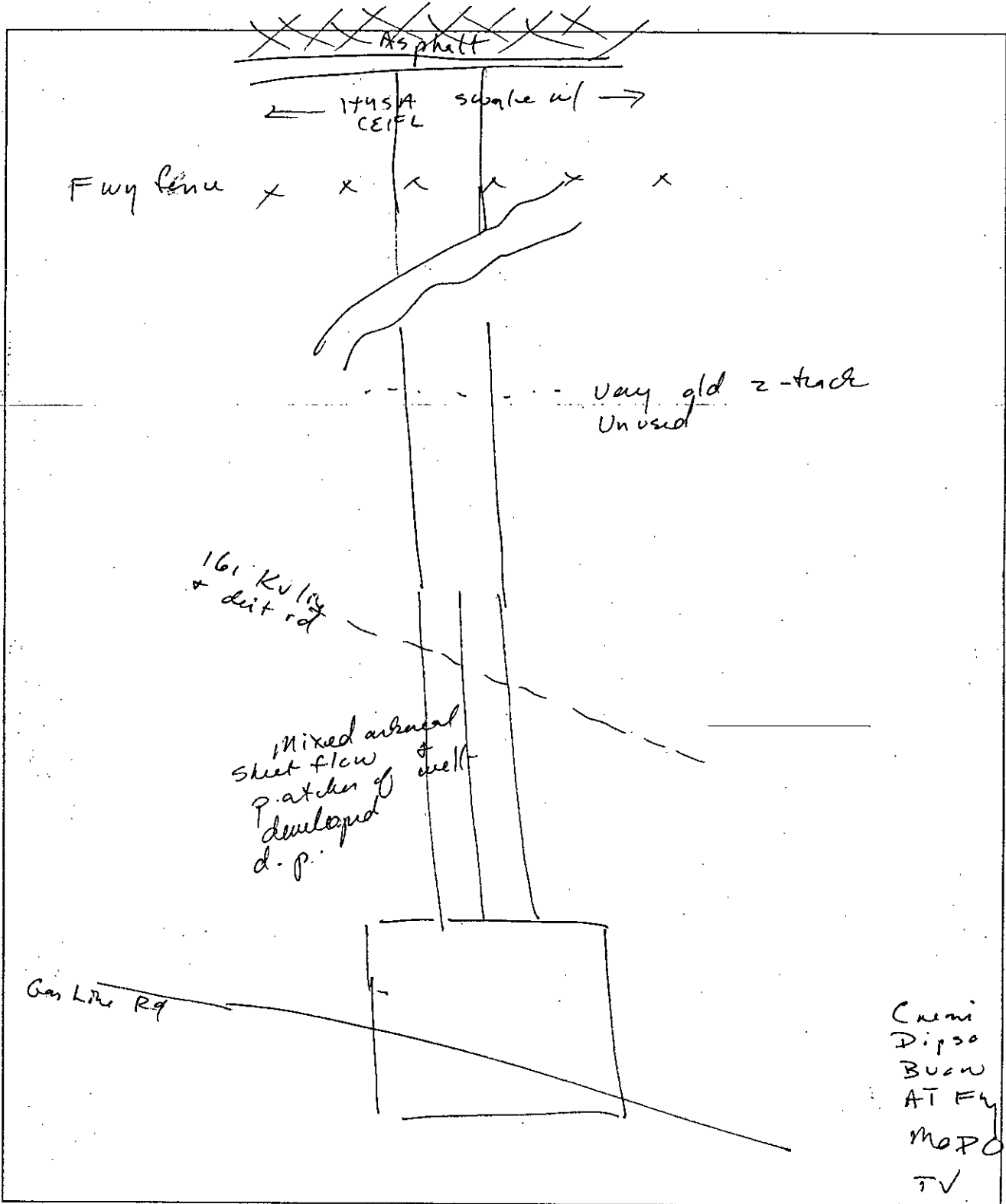
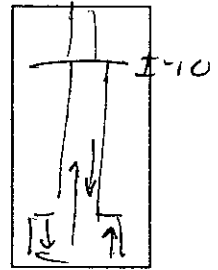


DATE 7 April 2013

LINEAR OR OTHER I.D. Gas Line Row

MAP LEGEND:

Transect,s: show start, and end by direction and transect number or ITTM



DATE 7 April 2013  
 TIME: Start 1822-1854 on April 7  
 End See return for 4/25

SURVEYORS: Navigator KARL  
 GPS \_\_\_\_\_  
 Data \_\_\_\_\_

WEATHER:

LINEAR I.D. Gas Line - 200m buffer

	Ta	Ts	Tg	Cloud Cover	Wind
Start + END	<u>30.6</u>	<u>30.6</u>	<u>32.4</u>	<u>Hazy - 70% clouds</u>	<u>NE 1</u>
End ST	<u>32.4</u>	<u>32.4</u>	<u>41.7</u>	<u>clear</u>	<u>N 3-4</u>
END	<u>30.3</u>	<u>30.3</u>	<u>33.2</u>	<u>clear</u>	<u>N 2-3</u>

04107 Location relative to I-10 So of 5-10  
 ST # Northern UTM 0665166 E 3726867 N  
 Southern UTM \_\_\_\_\_ E \_\_\_\_\_ N  
 (NAD 83)

Recent Weather: Clear (re: April 7)

TOTAL TRANSECT WIDTH 10m  
 (note FT or M)

GENERAL SITE DESCRIPTION:

VEGETATION SHRUB LAYER AND BUNCH GRASSES)

Aspect Dominants LATR  
 Also OLTE in shelting & in most drainages (all better drainages)

Common Species AMDU  
HYSA in more well-developed drainages w/ higher water volume/holding

Occasional Species CYLRAM, CYLECH

% Cover Out of drainages - 1-25. In drainages - 6-9.  
 Avg. Height of Dominant Shrub Species LATR - ~1m out of drainages; >1m - 1.5m in better washes

UNDERSTORY

Abundant Species Chaenactis, PLOV, CRAN

Exotics (Map concentrations and describe here relative to population size and geographic breadth.)

None obs (exc. SCITBAR)

TOPOGRAPHY

Landform Bajada

Drainage Type Sheet: (some times, often, arboresal w/ fairly short OLTE). Some sheeting, has only LATR w/ or w/o AMDU. Also, runnets shallow, discrete runnets (<1m deep) & several well-developed arboresal washes, mostly very shallow. Sandy bottoms

SUBSTRATE

Color Mottled grays to black  
 Coarse Particles (Type, % Cover) Sheeting - 100% gravel w/ milled gravel; sea shell small cobbles. Well-developed, broad d.p. patches - gravel.  
 Soil Texture and Consistence Soft, sandy to sandy coarse sand; gravelly. Under D.P. is gravelly, sl. sandy loam.

PRESENCE OF PREDATORS: Ravens - # Detected

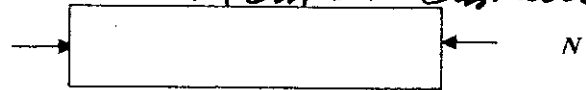
Coyotes - # Detected 0 Scat? 0 Scat Piles \_\_\_\_\_ # Nests \_\_\_\_\_

HUMAN-RELATED DISTURBANCES (Onsite and Adjacent)

Chuckwalla Rd, 3 large transmission lines (DPV1 + 2, B&P) Many creeks with old tracks across pavement, esp near I-10 (lots of I-10 construction)

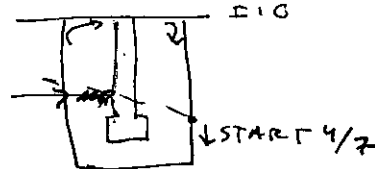
SITE PICTURE (Photographer)

A - Form   
 B - From end (identify)  
 C - From other end (identify)  
 D - Other See map on return



COMMENTS

This is tortoise habitat, albeit low densities. Very low cover and fairly minimal forage.



STOP on Apr. 7  
 0444732  
 3726992  
 (Flag)



April 7

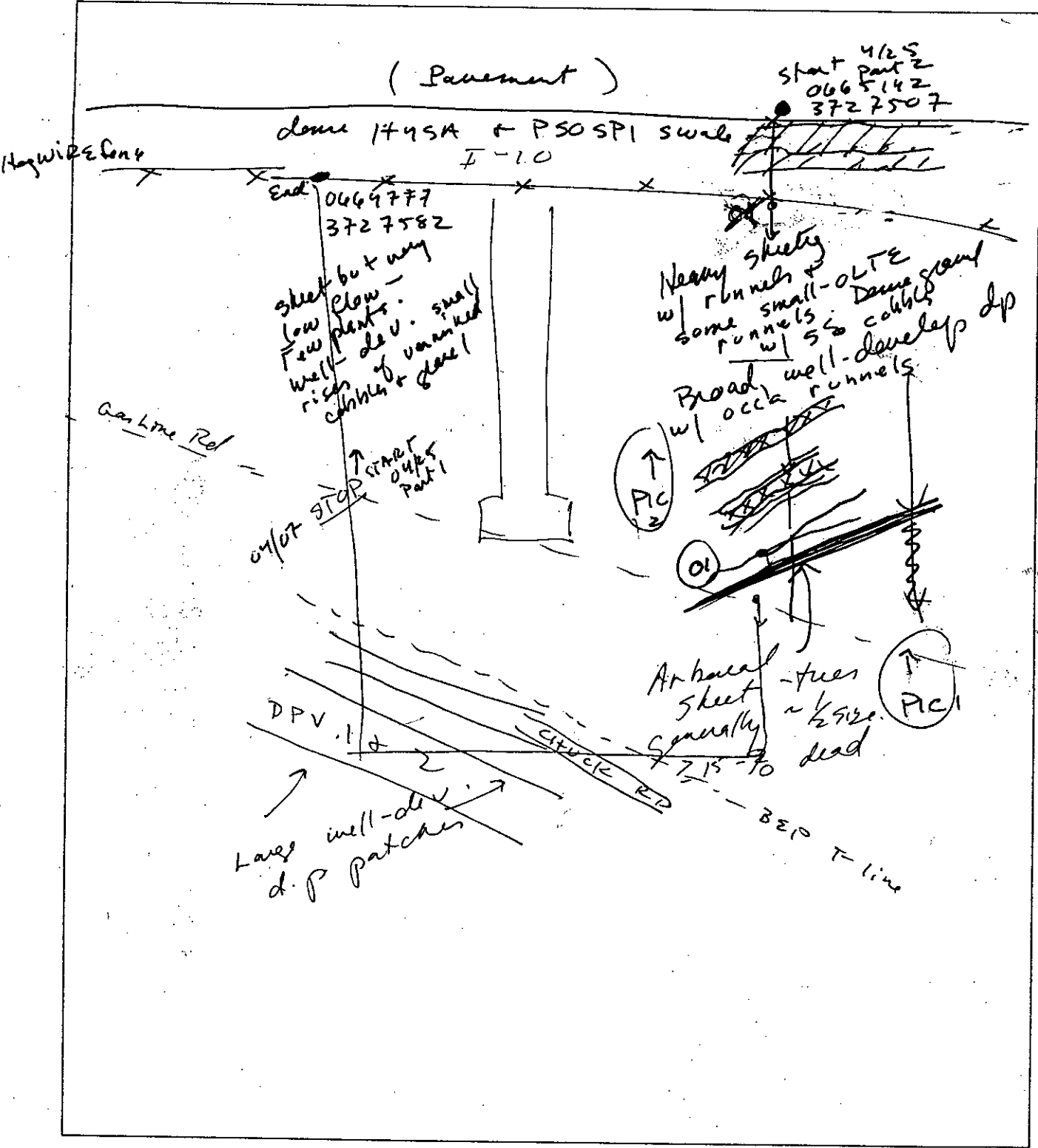
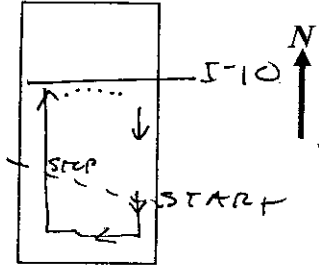
DATE April 25 2013

LINEAR OR OTHER I.D. 200m E+W - S of I-10

MAP LEGEND:

Transects: show start, and end by direction and transect number or ITM

Apr. 25 - 1601-1603 (Part 1)  
1751-1816 (Part 2)



DATE 27 April 2013  
TIME: Start 1609  
End 1735

SURVEYORS: Navigator Karl  
GPS \_\_\_\_\_  
Gasline Data \_\_\_\_\_  
LINEAR I.D. 400 buffer E+W, on gasline

WEATHER:

	T <sub>5cm</sub>	T <sub>g</sub>	Cloud Cover	Wind
Start	32.4	41.6	∅	W3
End	30.3	33.2	∅	N2-3

Location relative to I-10 South  
W Northern UTM 0664552 E 3727701 N  
E Southern UTM 0665398 E 3727425 N  
(NAD 83)

TOTAL TRANSECT WIDTH 10m  
(note FT or M)

Recent Weather: Clear, warm

GENERAL SITE DESCRIPTION:

VEGETATION SHRUB LAYER AND BUNCH GRASSES)

Aspect Dominants

Common Species

Occasional Species

% Cover \_\_\_\_\_

Avg. Height of Dominant Shrub Species

*Same as row & 200m buffer*

UNDERSTORY

Abundant Species

Exotics (Map concentrations and describe here relative to population size and geographic breadth.)

TOPOGRAPHY

Landform

Drainage Type

Elevation (state meters or feet)

SUBSTRATE

Color

Coarse Particles (Type, % Cover)

Soil Texture and Consistence

PRESENCE OF PREDATORS: Ravens - # Detected 0 # Nests 0

Coyotes - # Detected 0 Scat? \_\_\_\_\_ Scat Piles \_\_\_\_\_

HUMAN-RELATED DISTURBANCES (Onsite and Adjacent) DPV1 + 2, BSP line, gas line, wooden pole T-line, Chuckwalla Rd. old 4WD tracks (last 10-40yrs) on parts. Barring for I-10; I-10.

SITE PICTURE: Photographer Karl

- A - Form
- B - From end (identify) See map on reverse
- C - From other end (identify)
- D - Other \_\_\_\_\_



COMMENTS

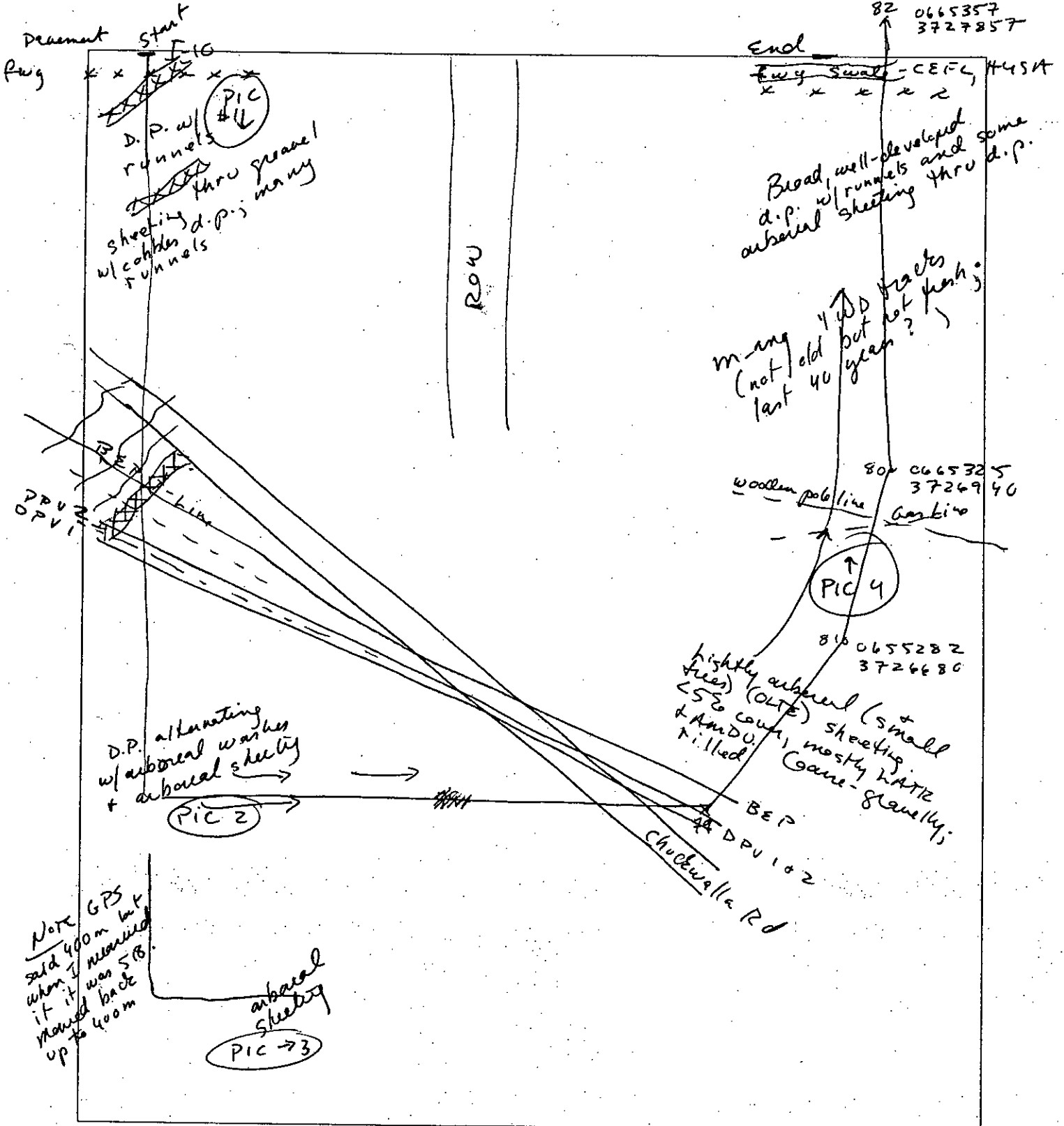


DATE 27 April 2013

LINEAR OR OTHER I.D. Gas Line S, 400 m buffer

MAP LEGEND:

Transect: show start, and end by direction and transect number or IITM





DATE 30 April 2013  
 TIME: Start 1043  
 End 1253

SURVEYORS: Navigator Karl  
 GPS  
 Data

WEATHER:

	Ta	Tg	Cloud Cover	Wind
Start	35.8	43.2	65% cirrus	N2-3
End	38.6	48.7	80% cirrus	S4-7

LINEAR I.D. Gas line - 600m buffer (all)

Location relative to I-10 South  
 Northern UTM E N  
 Southern UTM E N

Recent Weather: clear, hot

(NAD 83)  
 TOTAL TRANSECT WIDTH 10m  
 (note FT or M)

GENERAL SITE DESCRIPTION:

VEGETATION SHRUB LAYER AND BUNCH GRASSES)

- Aspect Dominants  
 (A) LATR, H4SA, OLTE  
 (B) LATR OLTE (washed)

Essentially 2 habitat types -

- Common Species  
 (A) H4SA AMDU  
 (B) H4SA AMDU
- Occasional Species SICH (A) H4SA

- (A) Arboreal Sheet  
 (B) Well-developed (oxidized) DP w/ interesting arboreal channels

- (A) Washed - LYAN CEFL (rare - only in very well-flowing channel)

% Cover (A) 34% (B) 41% on point All washes have ~ 10-12% cover  
 Avg. Height of Dominant Shrub Species  
 Varies - OLTE is scrubby to robust on sheet, robust (20-30') in better washes. LATR is 4.2 on arb. sheet, sheet on dyp. (20.6m)

UNDERSTORY

- Abundant Species PLUV CH(CA) CRAN

Exotics (Map concentrations and describe here relative to population size and geographic breadth.)

None exc. obivous; Tamarix @ main wash, vicinity of Chuckwalla Rd

TOPOGRAPHY

Landform Byada, gentle; very sl. und in d.p. areas, to ± flat.

Drainage Type (A) arb. sheet often w/ distinct washes (<0.3m deep) and dense flow in south-central

(B) Inlined arb. drainages, 2-several m wide and (1-3)m deep

Elevation (state meters or feet)  
702'

SUBSTRATE

Color (A) mottled gray (B) mottled dark grays → black  
 Coarse Particles (Type, % Cover) (A) Reddish granules of cobbles (B) Well-consolidated (90-100%) gravel w/ occa cobbles  
 Soil Texture and Consistence (A) Coarse-sandy, very gravelly, soft loamy sand (B) Gravelly loam, sl. silty but so gravelly that is difficult to dig

PRESENCE OF PREDATORS: Ravens = # Detected

Coyotes - Not Detected Scat? Scat Piles 0  
 (not much, however? one fox.)

HUMAN-RELATED DISTURBANCES (Onsite and Adjacent)

consider (4 T-tins) & Chuckwalla Rd; old barn blocking flow upslope of road. Also, many old tracks near fwy.

SITE PICTURE: Photographer Karl

- A - Form   
 B - From end (identify)  
 C - From other end (identify)  
 D - Other

See map on reverse for picture locations



COMMENTS

NOTE - From ~ 300 E to 600 E, I walked in the freeway swale. Mod dense H4SA mostly so some burrows would have been missed w/o a clearance - Very sunny. But sandy wash provided good opportunity to see tracks - no Footprints





Palen ~ T-line (= T-line area) annuals list - March 23, 2013

Lupinus arizonicus	BFF	L&LA
Crypt ang.		Crypt. plow.
Crypt. banks.		c Crypt (coll. 2)
Euph. poly.		Pecto helva
Esch glysto	F	Tha tan
CHBR	BFF	Ereumalche rotund
Crypt. mauritan		Erod. texanum
Crypt. nev.		
THACRE		
Canm. clav.		
Canm. brev.		
Mentz. involu.	F	
Lot.	BFF	
Mentzelia (alb.)		
Cam m (chaem.)		
MABL	F	
Gilia	BFF	
Chaenactis caeph.	BF	
Amisindia		
NADP	F	
Calyc. wrightii	F	
Pecto. recurv.	BFF	
SCAR		
Ericog thomarii	F	

Annual notes:

In bud ~~(many)~~  
 + flower + fruit  
 most. Few are  
 dry (occa Crypt  
 & Pecto.)  
 Some only in bud  
 (Ereumalche) or  
 bud + flower (Chaenactis,  
 Calyc., MABL,  
 plus several more)

DATE May 05 2013  
 TIME: Start 0553  
 End 1105

OBSERVER: A. Karl  
 General Area in Project: Gen-tie

WEATHER:

	Ta	Cloud Cover	Wind
Start	20.4	Sl. overcast, 90% cum; sunny by 0618	SW 0-2
End	27.3	90% overcast but sl. shadow	SW 1-3

(Draw map of survey on back of form)  
 Note - SR cloudy this A.M. @ 0540 still a little dark to see burrows activity.  
 Sunrise - 0559 (over Palen)

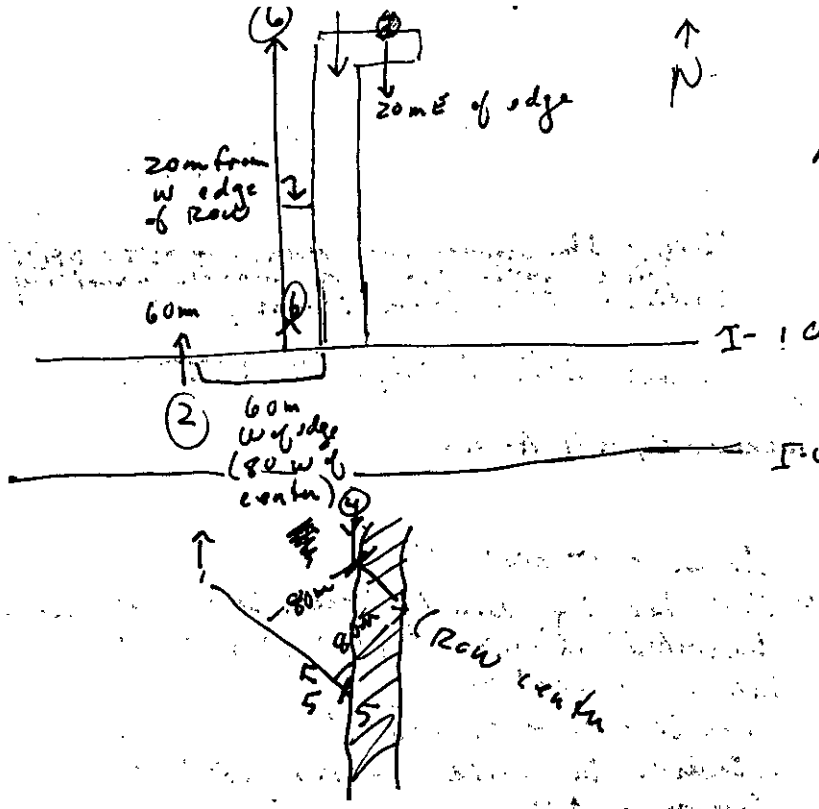
(Note: Civil Twilight is ~1940h)

Note: Mostly remained  $\pm$  overcast, sl. shadow, all A.M.

Time	Species	Observations
0553	ATFL	Heard - ~200' N
0621	LOSH ~0655918 3731582 200' SW	Juv. begging; heard; then saw w/ adult
0628	LOSH ~0656022 3731523	Reached on OLTE - 300' NE
0628	ATFL	Heard, ~200' N
0633	ATFL	Heard - W ~200-300'
0635	Verdin	2 indiv. in OLTE (wash), 150' S
0655	WIL WARB	Foraging - 80'
0700	ATFL	Heard - 250-300' NW
0715	ATFL	Heard - 300-300' N
0719	ATFL	Heard, then saw 175' W
0728	LOSH	Heard, then glassed - 180m N (same as ...)
0743	MeDO	Flying, 100' SW
0811	ATFL	Heard, ~300-400' W
0851	LOSH ~0656039 3731373	Heard, ~100m E
0903	LOSH ~0655958 3731052	2, heard then saw, perched. 180' W
0953	Noticeable increase in bee foraging @ OLTE	
0913	WIL Warb & Linid. warb	3, foraging in OLTE
0930	ATFL	Heard ~250-300' S
0938	BTSP	3 foraging ~100' ENE
0954	Verdin, BTGN, Lark Sparrow	CEFL wash
1001	WILWA & BTSP	~100m W of ROW, foraging
1026		Started Path 6, north. $\emptyset$ @ start
1034	WIL WARB	Heard ~200-250' W
1034	BTGN	Heard ~300' SW
1036	BTGN	Heard ~200' NW
1050	LOSH (Prob same as LOSH @ 0628h; same loc.)	Heard ~180-200m E; then saw - 2 indiv.

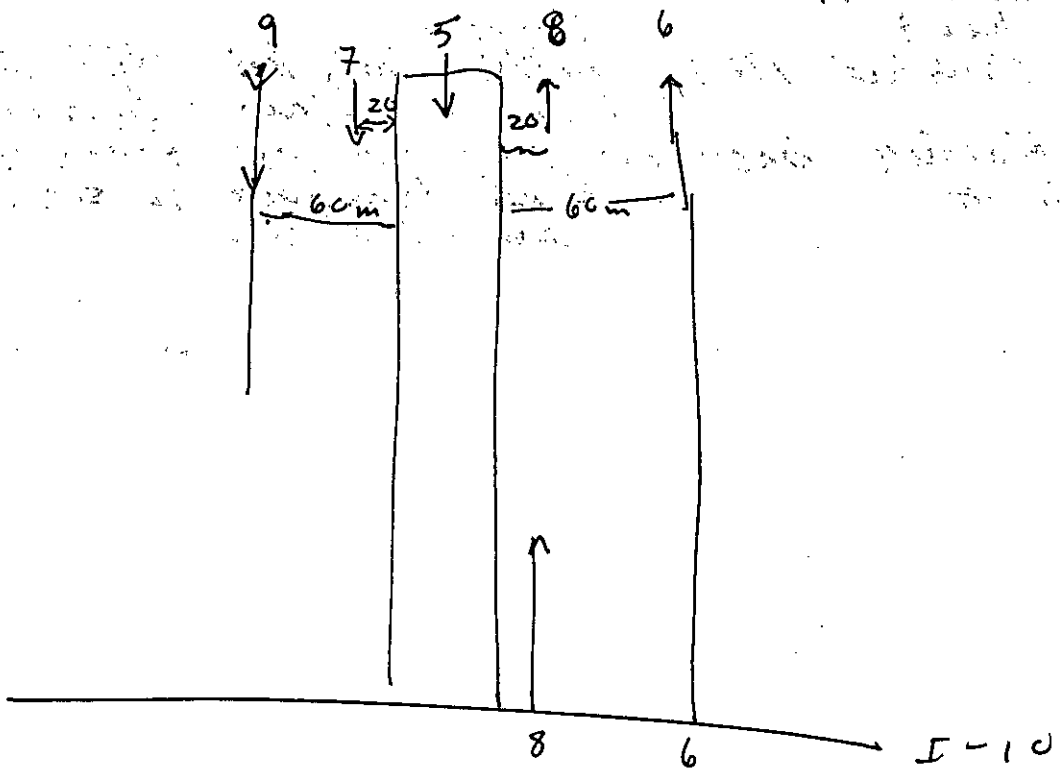
NOTE - D. Sunlight poles are  $\approx$  285m apart  
 NOTE - Higher quality washes & shreds (more incised, many more wash spp. indiv. of these spp.) w/in 100m W of ROW - HUSA, BESU, Hyptis, Occa FIRE + CEFL  
 KR

#1



Note Re: Path #6 - It's 20m W of row edge, but only about 3m from D. Sunlight pole. So goes thru their construction (bladed) area.









N  
06 55 954  
37 31 820  
3  
06 55 983  
37 30 261

PALEN BUOW SURVEY: MAY 25 2013 / AM  
TRANSMISSION LINE MAY 26 17:45 - DARK

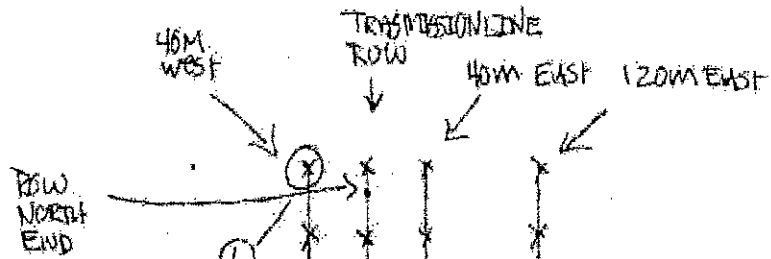
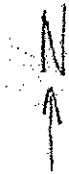
r<sup>2</sup>/2

MAPS N  
of SOUTH  
EMD

	120W	40 W	ROW	40E	120E
	V Ad	V Ad	V Ad	V Ad	V Ad
1560	HL Voc	START 06:56 5/26	∅ ∅	∅ ∅	∅ ∅ - START 17:40 5/25
1500	∅ ∅	V	∅ ∅	∅ ∅	∅ ∅
1400	∅ ∅		∅ V	∅ ∅	∅ Voc
1300	∅ ∅		∅ ∅	∅ ∅	∅ Voc
1200	∅ ∅		∅ ∅	∅ ∅	∅ ∅
1100	∅ ∅		∅ ∅	∅ ∅	∅ ∅
1000	∅ ∅		∅ ∅	∅ Voc	∅ ∅
900	∅ ∅		∅ ∅	∅ Voc	∅ Voc
800	∅ Voc		∅ Voc	∅ ∅	∅ ∅
700	∅ ∅		∅ ∅	∅ ∅	∅ ∅
600	∅ ∅		∅ ∅	∅ ∅	∅ ∅
500	∅ ∅		∅ ∅	∅ ∅	∅ Voc
400	∅ ∅		∅ ∅	∅ ∅	∅ ∅
300	∅ ∅		∅ ∅	∅ ∅	∅ ∅
200	∅ ∅		(-10) ∅ ∅	∅ ∅	∅ ∅
100	∅ ∅		∅ ∅		∅ ∅
0	∅ ∅		∅ ∅		
100	∅ ∅		∅ ∅		
150	∅ ∅		∅ ∅		

~~∅ ∅~~

V = Visual results of 100 m binocular sweep  
Ad = Audio results during 100m binocular sweep  
HL = Horned Lark  
Voc = Bird calls heard - mostly Horned Lark  
Possibility verdin  
∅ = no observation



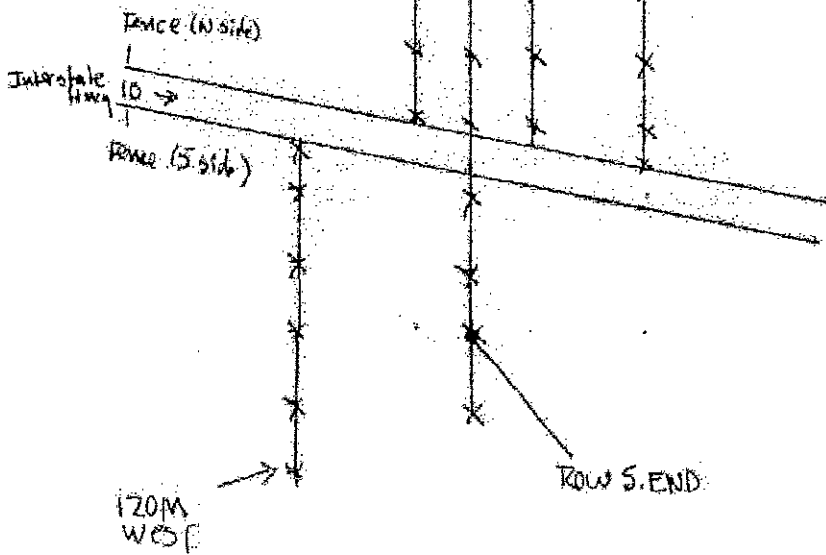
X = location of binocular sweeps

⊗ = observations during binocular sweeps

① = observation number

X → X = 100 meters

PALEN SECS  
TRANSMISSION LINE  
BURROWING OWL  
Phase 3 Survey  
25-26 May 2013



DATE 25 MAY 2013  
 TIME: Start 07:30  
 End 10:10

GAS LINE

OBSERVER: PAUL FRANK  
 General Area in Project: E of Corn Springs across I 10

(Draw map of survey on back of form)

WEATHER:

	Ta	Cloud Cover	Wind
Start	28	20% vmi	Calm
End	32	Clear	Calm

Time	Species	see MAP ↓	Observations
07:35	Horned Lark (also veed in possible)	(1)	vocalizations
07:40	Horned Lark	(2)	vocalizations and one bird flying
08:30	BURROWING OWL	(3)	Owl observed flying low (06 65 070 / 37 27 736) from assumed coversite (06 65 067 / 37 27 687), which was a pile of 3 dumped concrete footers. I did not see the owl fly from this location but it came from near the pile and it would have made an excellent coversite. NO OWL sign was found at that location, or at a Road Ironwood Tree the Owl perched on (06 65 185 / 37 27 821). NO other possible coversites or burrows <del>or</del> or any Owl sign was found in this area. The Owl flew to the NE and was not seen again.
09:10	Horned Lark (also veed in possible)	(4)	vocalizations (NO live birds seen)
09:15		(5)	
09:30		(6)	
09:40		(7)	
09:45		(8)	
09:50		(9)	
10:00		(10)	
10:05		(11)	

PALEIV BUOW SURVEY MAY 25 2013  
Cms Line

Arrl  
First light → 11:00

North End

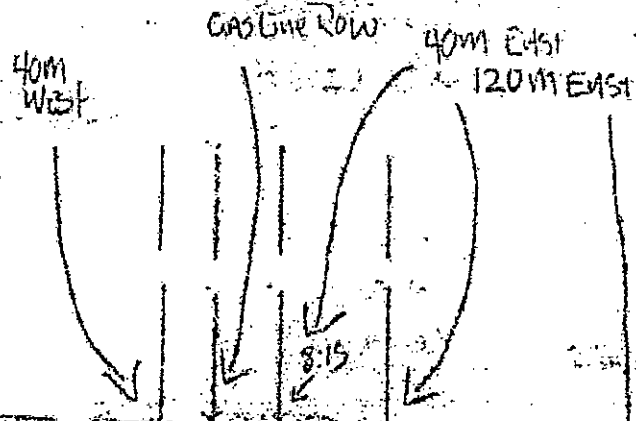
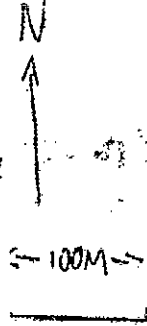
Meters North of South end	40W V Ad	ROW V Ad	40E V Ad	120E V Ad
<del>1100</del> EWB 1200				
<del>1000</del> 1100		∅	unk	
<del>1000</del> 1000		∅	∅	
900	∅ ∅ 08:50	∅ ∅ 08:15	∅ ∅	∅ ∅ 08:20
800	∅ ∅	∅ ∅	∅ ∅	(000) ∅ - 08:30
700 - Fence I10	∅ ∅	∅ ∅	∅ ∅	∅ ∅
600 - Fence	∅ ∅	∅ ∅	∅ ? 09:50	∅ ? they note
500	∅ ∅	∅ ∅	∅ ∅	∅ 08:00 VOC
400	∅ <del>08:00</del>	∅ 08:00 VOC	∅ <del>08:00</del> VOC	∅ <del>08:00</del> VOC
300	∅ ∅ 08:00 VOC	∅ 08:00 VOC	∅ ∅	∅ <del>08:00</del> VOC
200	∅ ∅	∅ ∅	∅ ∅	∅ ∅
100	∅ ∅	∅ ∅	∅ 08:00 VOC	∅ ∅
0	∅ ∅	∅ ∅	∅ ∅	∅ 08:00 VOC

South end.

EWB  
10:10

BUOW01 - owl flying NE - as I scanned -  
 BUOW02 - may have been using as cover, old pile of concrete pavers - no owl cover  
 BUOW03 - dead skinned - white owl perched - no sign

BUOW01	-	06 65 070	37 27	736
BUOW02	-	06 65 067	37 27	684
BUOW03	-	06 65 185	37 27	821



PALEW SEAS  
 BURROWING OWL  
 PHASE 3 SURVEY  
 GAS LINE  
 25 MAY 2013  
 07:30 - 10:10

06 64 944  
 37 27 840

8:30

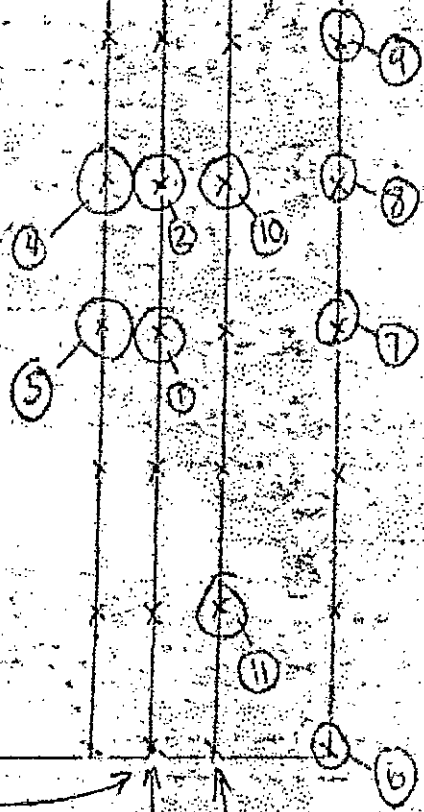
06 65 185 - Dead Jern Owl  
 37 27 821 Perched on (NW Sign)

06 65 070 - location Burrowing Owl  
 37 27 736 was observed from



06 65 067 - Possible cover  
 37 27 684 site the owl  
 was ~~using~~  
 using  
 (NW Sign)

- X = location & binocular sweeps
- (X) = observations ~~made~~ during binocular sweeps
- (1) = observation number



06 64 956  
 37 26 940

START 07:30  
 END 10:10

PROJECT: Palen SEGS  
 BURROWING OWL PHASE 3 SURVEY

DATE 27 June 2013  
 TIME: Start 0520  
 End 0931

OBSERVER: Karl  
 General Area in Project: Gen-Tie

WEATHER:

	Ta	Cloud Cover	Wind
Start	28.4	Ø	W-2
End	38.4	Ø	S.3

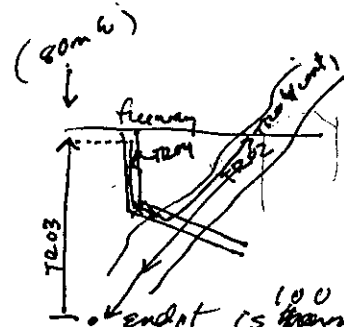
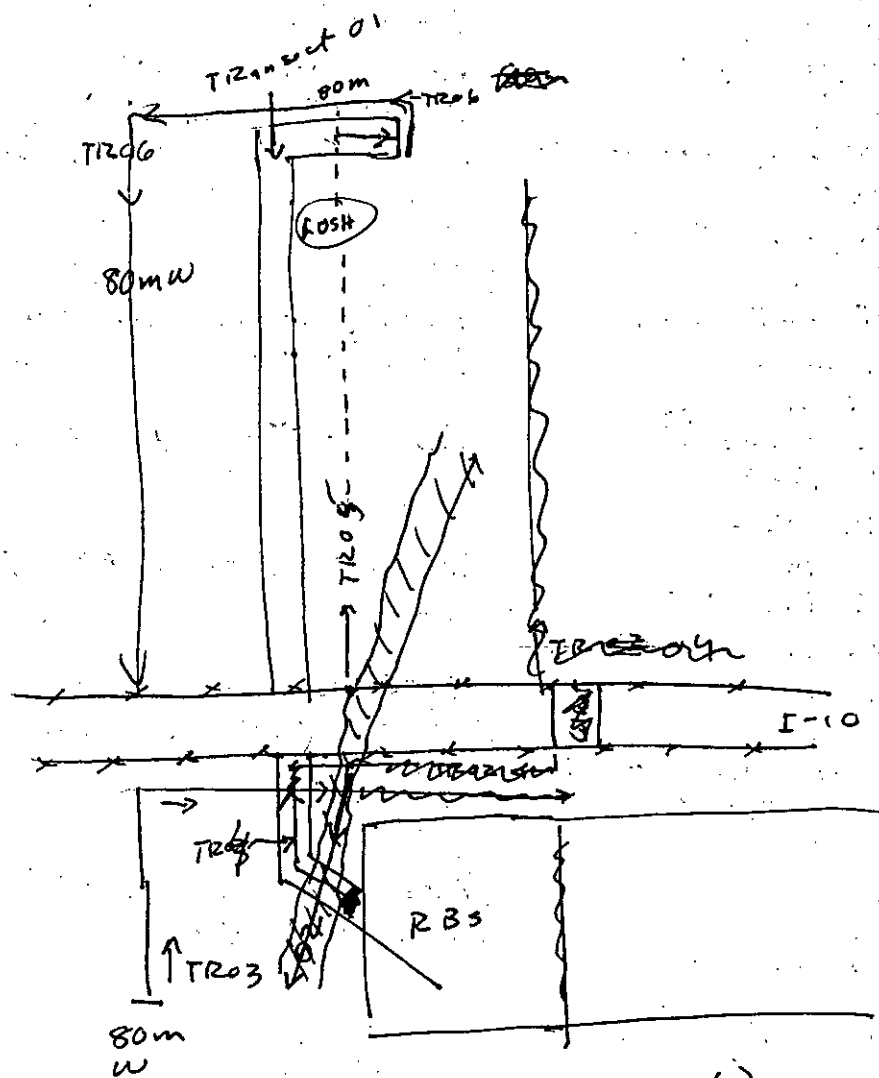
(Draw map of survey on back of form)  
 official sunrise - 0530 (Arrived at site - 0548)  
 Note: 0449 - Too dark  
 0506 - Too dark  
 0520 - o.k.

U of I-10

So side of fence

U of I-10

Time	Species	Observations
0520	Begin TR 01	
0534	<del>TR 01</del> Cactus wren	Heard ~ 150 m E (My loc. = 0655957 3731736)
0535	A-t Flycatcher	Heard ~ 100 m ENE
0544	A-t Flycatcher	1 heard ~ 150 m ESE (different bird?)
0544	A-t Flycatcher	Heard ~ 100 m WSW
0553	B-t Gnatcatcher (3)	Heard, then saw, ~ 75 m E (my loc. = 0655959 3731088)
0608	End TR 01	
0619	Begin TR 02	
0617	Verdin	Nest only, in CEFL on N side of culvert
0633	B-t Gnatcatcher	12 m, seen, in OLTE
0633	B-t Gnat	Heard ~ 30 m upstream
0639	Begin TR 03	
0642	B-t Gnat	Heard - ~ 90 m NNE in OLTE group
0645	End TR 03	
0648	Begin TR 04	
0647	Verdin	Heard ~ 30 m NNE in CEFL, next to I-10
0700	End TR 04	
0704	Begin TR 05 (=80m E)	
0715	A-t fly	Heard ~ 200 m ENE
0730	A-t fly	Heard ~ 150 m SSE
0730	Cactus wren - 2	Heard, then saw one ~ 100 m W; the other ~ 120 m SSE
0739	End TR 05	(NOTE - same as one heard earlier)
0740	TR 06	
0825	AT Fly	Heard ~ 125 m SSW
0835	Verdin	Heard then saw, in OLTE 40 m W
0841	End TR 06	
0844	Start TR 07	
0848	Verdin	Heard, ~ 80 m E
0931	End TR 07	



• endpt is 100 from "x"  
 (= 80 m from Row edged)



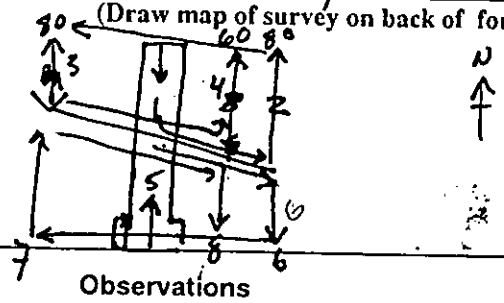
DATE 26 June 2013  
 TIME: Start 1754  
 End 2019

Sunset - 1951h  
 Sunrise - ~~0530~~ 29  
 (0530 on 6/27)

OBSERVER: Karl  
 General Area in Project: Gas Line  
 (Start on north side, then move to S)  
 (Draw map of survey on back of form)

WEATHER:

	Ta	Cloud Cover	Wind
Start	46.5	Ø	WSW-3-6
End 1906	39.5	Ø	SW-4-8
2019	37.4	Ø	SW 4



North side  
 Row 1  
 Row 2  
 Row 3  
 Row 4  
 Row 5  
 Row 6  
 Row 7  
 Row 8

Time	Species	Observations
1754-1808	Transect 01	- No birds
1809-1815	Tr. 02	- No birds
1820-1827	Tr. 03	- No birds
1830-1835	Tr. 04	- No birds
NOTE - As always, scanned in BUOW between transects		
1838-1906	Diode to south side (no access under fly from Row)	
1909-1924	Tr. 05	
1917	Vandery	heard (while I was under OLTE)
1930-1944	TR 04	No birds
1948-2002	TR 07	No birds
2008-2019	TR 08	No birds
Note - 2019 is a good endpt. Getting too close to glass or see very far.		

PROJECT: Palen Solar Energy Generating System  
 2013 SPECIAL-STATUS PLANT SPECIES SURVEYS

DATE 3-30 2013  
 TIME: Start 7<sup>00</sup> - 8<sup>15</sup>  
 End 8<sup>45</sup>

SURVEYORS: Navigator Glen Rink

GPS Glen Rink

Data Tim Thomas

WEATHER:

	Ta	Tg	Cloud Cover	Wind
Start	73F	72.6F	99%	Ø
End	74.8F	74.8F	95%	2.4

LINEAR ID E T-line

Location relative to I-10 S. side to N

Northern UTM 664940 E 3727840 N

Southern UTM 664972 E 3726937 N

(NAD 83)

TOTAL TRANSECT WIDTH 12'

(note FT or M)

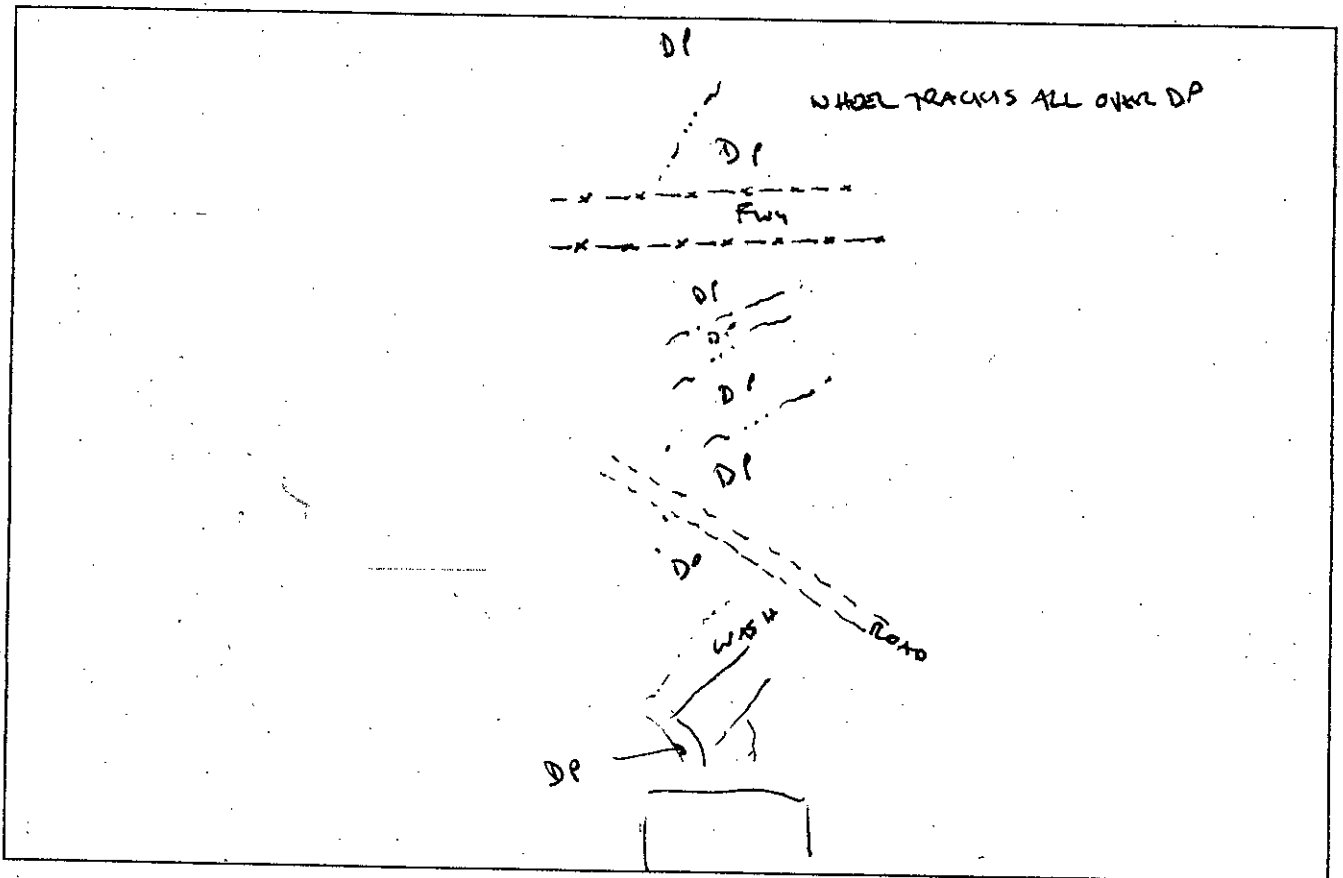
SE  
Cave.

LEGEND: DP Desert Pot

WASH

- Show transect, start, and end by direction and transect number
- Map plant populations by sign number
- Map and briefly describe hydrology, desert pavement, and dunes

N



Photos:

Form

1 S → N

2 N → S

LOCATION:

SIGN NUMBER	WYPT #	UTM (NAD 83)	SPECIES	PHENOLOGICAL STAGE	PLANT VIGOR (e.g., height, robustness)	PHOTO (check, whose camera)	VOUCHER (check, who has, reference number)	COMMENTS
#								
MICROHABITAT DESCRIPTION:				Shrub Dominants	Other Shrubs	Herbaceous Associates	Topography	Soils and Substrates
POPULATION SIZE AND AREA:				Number of Plants	Area (m2) or length of population (if in drainage)			
POPULATION THREATS:				Anthropogenic	Invasives (Sp, Abundance)		Natural	
#								
MICROHABITAT DESCRIPTION:				Shrub Dominants	Other Shrubs	Herbaceous Associates	Topography	Soils and Substrates
POPULATION SIZE AND AREA:				Number of Plants	Area (m2) or length of population (if in drainage)			
POPULATION THREATS:				Anthropogenic	Invasives (Sp, Abundance)		Natural	
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POPULATION SIZE AND AREA:				Number of Plants	Area (m2) or length of population (if in drainage)			
POPULATION THREATS:				Anthropogenic	Invasives (Sp, Abundance)		Natural	

PROJECT: Palen Solar Energy Generating System  
 2013 SPECIAL-STATUS PLANT SPECIES SURVEYS

DATE Mar 30 2013  
 TIME: Start 9:45  
 End 1 pm

SURVEYORS: Navigator Allen Rank  
 GPS Allen Rank  
 Data Tim Thomas

WEATHER:

	Ta	Tg	Cloud Cover	Wind
Start	85	86.5	55%	2
End	89	94	<5%	6-8

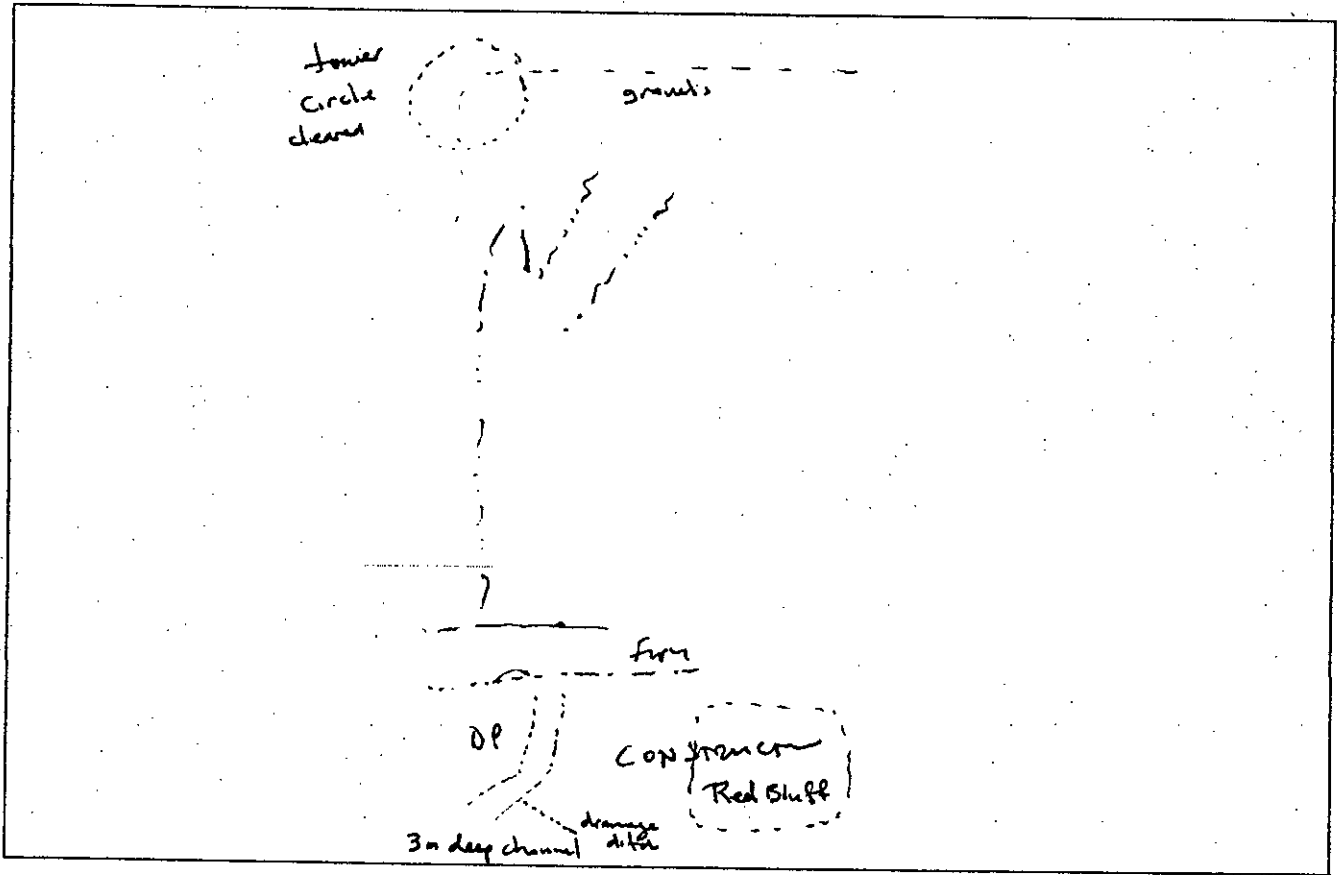
LINEAR ID West T-line  
 Location relative to I-10  
 Northern UTM 655937 E 3731764 N  
 Southern UTM 655937 E 3731764 N  
 (NAD 83)  
 TOTAL TRANSECT WIDTH 10 m  
 (note FT or M)

LEGEND:

81.3  
 EOP

- Show transect, start, and end by direction and transect number
- Map plant populations by sign number
- Map and briefly describe hydrology, desert pavement, and dunes

N



Photos:   
 Form \_\_\_\_\_  
 ① \_\_\_\_\_  
 ② \_\_\_\_\_

LOCATION:

SIGN NUMBER	WYPT #	UTM (NAD 83)	SPECIES	PHENOLOGICAL STAGE	PLANT VIGOR (e.g., height, robustness)	PHOTO (check, whose camera)	VOUCHER (check, who has, reference number)	COMMENTS
#								
MICROHABITAT DESCRIPTION:				Shrub Dominants	Other Shrubs	Herbaceous Associates	Topography	Soils and Substrates
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