

1R - 425-75

APPROVALS

YEAR(S):

2012

Hansen, Edward J., EMNRD

From: Hansen, Edward J., EMNRD
Sent: Monday, August 13, 2012 1:59 PM
To: Hack Conder (hconder@riceswd.com)
Cc: Leking, Geoffrey R, EMNRD; Laura Pena (lpena@riceswd.com); Scott Curtis (scurtis@riceswd.com)
Subject: Remediation Plan (1R425-75) Termination - ROC Vacuum Jct C-7 Site

**RE: Termination Request
for the Rice Operating Company's
Vacuum Jct C-7 Site
Unit Letter C, Section 7, T18S, R35E, NMPM, Lea County, New Mexico
Remediation Plan (1R425-75) Termination**

Dear Mr. Conder:

The New Mexico Oil Conservation Division (OCD) has received Rice Operating Company's report and request to close the above-referenced site, dated June 8, 2012 (received June 12, 2012) and the photo documentation of August 13, 2012. The report is acceptable to the OCD.

The above-referenced report, submitted in accordance with 19.15.29 NMAC (Rule 29; formally, Rule 116), indicates that Rice Operating Company has met the requirements of 19.15.29 NMAC; therefore, the OCD approves the report and hereby notifies you that the remediation plan (1R425-75) is terminated in accordance with 19.15.29 NMAC.

Please be advised that OCD approval of this report does not relieve the owner/operator of responsibility should operations pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

If you have any questions regarding this matter, please contact me at 505-476-3489.

Edward J. Hansen
Hydrologist
Environmental Bureau

RECEIVED OOD

2012 JUN 12 P 12:43

RICE *Operating Company*

122 West Taylor • Hobbs, New Mexico 88240

Phone: (575) 393-9174 • Fax: (575) 397-1471

CERTIFIED MAIL

RETURN RECEIPT NO. 7007 2560 0000 4569 8593

June 8, 2012

Mr. Edward Hansen
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

RE: Termination Request
Vacuum Jct. C-7 (1R425-75): UL/C, Sec. 7, T18S, R35E
RICE Operating Company – Vacuum SWD System

Mr. Hansen:

Rice Operating Company (ROC) is the service provider (agent) for the abandoned Vacuum Saltwater Disposal (SWD) System and has no ownership of any portion of the pipeline, well, or facility. The System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Background

In 2006, ROC initiated work on the former C-7 junction box as part of the system abandonment. The site is located in UL/C, Sec. 7, T18S, R35E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 100 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 20x20x12-ft deep excavation. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbon. Representative composite samples of the 4-WALL, excavation bottom, and blended backfill were sent to the laboratory for analysis of chloride, TPH, and BTEX, resulting in a 4-WALL chloride concentration of 64 mg/kg, a gasoline range organics (GRO) concentration of 28.5 mg/kg, and a diesel range organics (DRO) concentration of 974 mg/kg. The excavation bottom laboratory analysis resulted in chloride concentrations of <16 mg/kg, a GRO concentration of 138 mg/kg, a DRO concentration of 1,370 mg/kg, a benzene and toluene concentration below detectable limits, an ethyl benzene concentration of 0.134 mg/kg, and a total xylenes

concentration of 0.097 mg/kg. The blended backfill laboratory analysis resulted in a chloride concentration of 64 mg/kg, a GRO concentration of 13.2 mg/kg, and DRO concentration of 960 mg/kg. The excavated soil was blended on site with clean imported soil. The blended backfill was returned to the excavation to ground surface and contoured to the surrounding area. On 3/20/2006, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate.

To further investigate the depth of TPH presence, a soil boring was initiated on 2/9/2009 at the former junction box site. The boring was advanced to a total depth of 30 ft BGS with soil samples collected every 5 ft and field tested for chlorides and organic vapors. The 30 ft sample was sent to a laboratory for analysis of chloride and TPH, resulting in a chloride concentration of 16 mg/kg, and GRO and DRO concentrations below detectable limits. The entire bore hole was plugged with bentonite to ground surface. The junction box final report, photo documentation, laboratory analysis, PID sheet, and boring log are attached.

Recommendations

Site investigation demonstrates that residual chloride and hydrocarbons in the vadose zone will not with reasonable probability contaminate groundwater in excess of NMOCD standards. This site meets the requirements of the NMOCD-approved Revised Junction Box Upgrade Work Plan (July 16, 2003). As such, ROC request termination of the regulatory file, or similar closure status.

Please contact me at (575)393-9174 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely,
RICE Operating Company



Hack Conder
Environmental Manager

enclosures

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
Vacuum	Jct. C-7	C	7	18S	35E	Lea	eliminated		

LAND TYPE: BLM _____ STATE X FEE LANDOWNER _____ OTHER _____

Depth to Groundwater 100 feet NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started 3/1/2006 Date Completed 2/9/2009 OCD Witness no

Soil Excavated 177.8 cubic yards Excavation Length 20 Width 20 Depth 12 feet

Soil Disposed 120 cubic yards Offsite Facility Sundance Location Eunice, NM

FINAL ANALYTICAL RESULTS: Sample Date 10/3/2006, 2/9/2009 Sample Depth 12 ft, 30 ft

Procure 5-point composite sample of bottom and 4-point composite sample of sidewalls. TPH, BTEX and Chloride laboratory test results completed by using an approved lab and testing procedures pursuant to NMOCD guidelines.

Sample Location	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg	GRO mg/kg	DRO mg/kg	Chloride mg/kg
4-WALL COMP.	PID = 0.0 (field)				28.5	974	64
BOTTOM COMP.	<0.005	<0.005	0.134	0.097	138	1370	<16
BACKFILL COMP.	PID = 0.0 (field)				13.2	960	64
SOIL BORE #1 @ 30'	PID = 1.9 (field)				<10	<10	16

General Description of Remedial Action: This junction box was addressed as part

of the Vacuum SWD System abandonment. After the former junction box was removed

an investigation was conducted using a backhoe to excavate the site to dimensions of

20x20x12-ft deep. Representative composite samples were collected and sent to a

commercial laboratory for analysis of chloride, TPH, and BTEX. The laboratory confirmed

low concentrations of chloride but slightly elevated concentrations of TPH. The excavated

soil was blended on site with clean, imported soil. The blended backfill was then returned

to the excavation to ground surface and contoured to the surrounding area. On 3/20/2006,

the site was seeded with a blend of native vegetation and is expected to return to a

productive capacity at a normal rate. To further investigate depth of TPH presence, a soil

boring was initiated on 2/9/2009 at the former junction box location. The boring was advanced to a depth of 30 ft BGS while soil samples

were collected every 5 ft and field tested for chlorides and organic vapors. The 30 ft sample was analyzed by a commercial laboratory for

chloride and TPH which confirmed low concentrations of each. The entire borehole was plugged with bentonite to the ground surface.

enclosures: photos, lab results, PID (field) screenings, boring log, BTEX comparison study, chloride curve

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	329
bottom comp.	12'	421
SOIL BORING at the former junction (2/9/2009)	15'	148
	20'	122
	25'	87
	30'	117

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY
KNOWLEDGE AND BELIEF.

SITE SUPERVISOR Roy Rascon SIGNATURE not available COMPANY RICE OPERATING COMPANY

REPORT ASSEMBLED BY Katie Jones INITIAL KJ

PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE Larry Bruce Baker Jr. DATE 11-13-09

Vacuum Jct. C-7

Unit C, Section 7, T18S, R35E



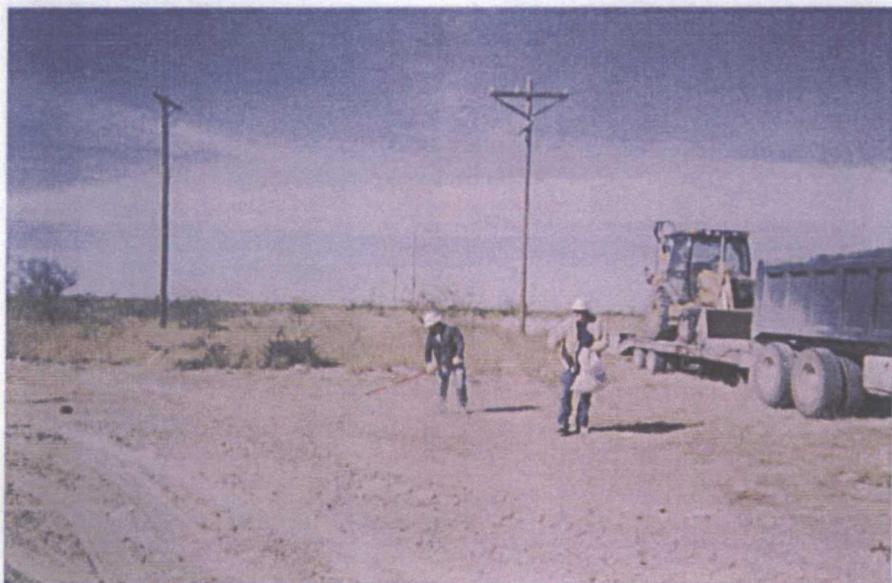
former junction box site

4/18/2002



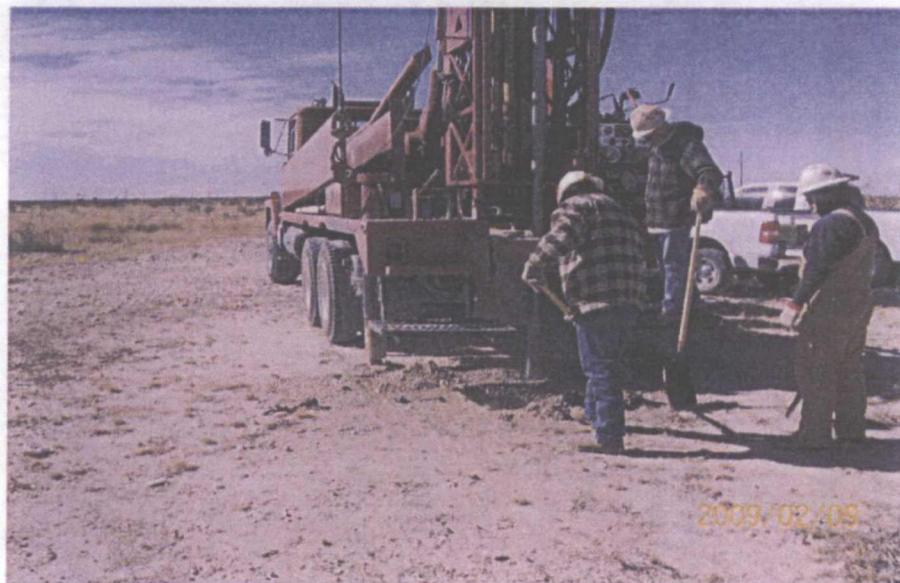
excavating the former junction box site

10/4/2006



seeding backfilled site

11/6/2006



soil boring the former junction box site

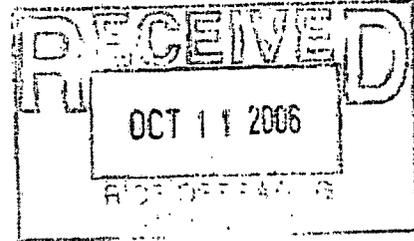
2/9/2009



ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2325 • 101 E. MARLAND • HOBBS, NM 88240



ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: ROY R. RASCON
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 10/05/06
Reporting Date: 10/09/06
Project Number: NOT GIVEN
Project Name: VACUUM JCT. C-7
Project Location: NOT GIVEN

Sampling Date: 10/03/06 & 10/04/06
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC/HM

COPY

LAB NUMBER	SAMPLE ID	GRO	DRO	CI*
		(C ₆ -C ₁₀) (mg/Kg)	(>C ₁₀ -C ₂₈) (mg/Kg)	(mg/Kg)
	ANALYSIS DATE	10/08/06	10/08/06	10/09/06
H11619-2	BTTM FIELD COMP. @ 12'	138	1370	<16
H11619-3	BACKFILL COMP.	13.2	960	64
H11619-4	4 WALL COMP. 20'x20'	28.5	974	64
	Quality Control	769	784	490
	True Value QC	800	800	500
	% Recovery	96.1	98.0	98.0
	Relative Percent Difference	2.4	1.2	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CI'B

*Analyses performed on 1:4 w:v aqueous extracts.

Chemist

10/10/06
Date

H11619A

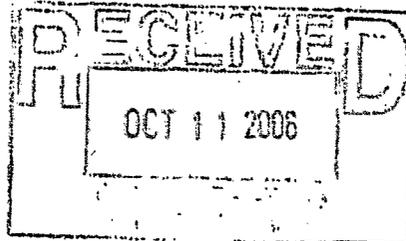
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ANALYTICAL RESULTS FOR
 RICE OPERATING CO.
 ATTN: ROY R. RASCON
 122 W. TAYLOR
 HOBBS, NM 88240
 FAX TO: (505) 397-1471



Receiving Date: 10/05/06
 Reporting Date: 10/09/06
 Project Number: NOT GIVEN
 Project Name: VACUUM JCT. C-7
 Project Location: NOT GIVEN

Sampling Date: 10/03/06
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: BC
 Analyzed By: BC

COPY

LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
	ANALYSIS DATE	10/06/06	10/06/06	10/06/06	10/06/06
	H11619-1 COMPOSITE, BTTM #1-#5	<0.005	<0.005	0.500	0.360
	H11619-2 BTTM FIELD COMP. @ 12'	<0.005	<0.005	0.134	0.097
	Quality Control	0.104	0.099	0.102	0.300
	True Value QC	0.100	0.100	0.100	0.300
	% Recovery	104.0	98.9	102	100.0
	Relative Percent Difference	0.7	<0.1	1.3	3.9

METHOD: EPA SW-846 8260

Burgess J. Cashe
 Chemist

10/9/07
 Date

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(325) 673-7001 Fax (325) 673-7020 (505) 393-2326 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page ___ of ___

Company Name: <u>Rice Operating Co</u>		BILL TO		ANALYSIS REQUEST	
Project Manager: <u>Roy R. Rascon</u>		P.O. #:		COPY	
Address: <u>122 W. Taylor</u>		Company:			
City: <u>Hobbs</u> State: <u>N.M.</u> Zip: <u>88240</u>		Attn:			
Phone #: <u>393-9174</u> Fax #: <u>397-1471</u>		Address:			
Project #: <u>AFBO Vacuum Jct. C</u> Project Owner:		City:			
Project Name:		State: Zip:			
Project Location:		Phone #:			
Sampler Name: <u>W. Rascon</u>		Fax #:			

Lab I.D.	Sample I.D.	(S)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.			SAMPLING		TPH	CI-	BTEX
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME			
H11619-1	Bttm #1	G	1			✓					✓		10-3-06	9:30 AM.			
	Bttm #2	G	1			✓					✓		10-3-06	9:30 AM.			
	Bttm #3	G	1			✓					✓		10-3-06	9:30 AM.			
	Bttm #4	G	1			✓					✓		10-3-06	9:30 AM.			
	Bttm #5	G	1			✓					✓		10-3-06	9:30 AM.			
H11619-2	Bttm Field Comp. @12'	C	1			✓					✓		10-3-06	9:30 AM.	✓	✓	✓
	Backfill Comp.	C	1			✓					✓		10-4-06	12:50 PM.	✓	✓	
	4 well Comp. 20'x20'	C	1			✓					✓		10-4-06	12:40 PM.	✓	✓	

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Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished By: <u>W. Rascon</u>		Date: <u>10-5-06</u>	Received By: _____	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No
Relinquished By: _____		Time: <u>5:00 p.m.</u>	Received By: (Lab Staff) <u>Burgett & Cook</u>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No
Delivered By: (Circle One)		Date: _____	Checked By: _____	REMARKS: <u>BTTM # 1-5 composite in lab & RUN BTEX</u>
Sampler - UPS - Bus - Other:		Time: _____	Sample Condition Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

† Cardinal cannot accept verbal changes. Please fax written changes to (325) 673-7020.

RICL OPERATING COMPANY

122 West Taylor Hobbs, NM 88240

Phone: (505) 393-9174 Fax: (505) 397-1471

VOC FIELD TEST REPORT FORM

PID METER READING & CALIBRATION

CK. MODEL: PGM 761S
 MODEL MODEL: PGM 761S
 NO. MODEL: PGM 7600

SERIAL NO: 104412
 SERIAL NO: 104490
 SERIAL NO: 110-12383

LOT NO: 75-2992
 FILL DATE: 11-28-05
 ACCURACY: +/- 2%

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

COPY EXP. DATE: 5-28-07
 METER READING ACCURACY: 100.0

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
Vacuun	Jct. C-7	C	7	18	35

SAMPLE	S. wall	PID Results	Sample	West wall	PID Results
1		0.1	1		0.1
2		0.1	2		0.1
3		0.1	3		0.1
4		0.1	4		0.1
5		0.1	5		0.1
Spt. Comp. S. wall		0.1	Spt. Comp. W. wall		0.1
E. wall			4 wall comp.		0.0
1		0.0			
2		0.0	Backfill comp.		0.0
3		0.0			
4		0.0			
5		0.0			
Int. Comp. E. wall		0.0			

I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATURE: [Signature]

DATE: 11-4-06

Logger:	Tony Grieco	Client:	RICE Operating Company	Well ID:	SB - 1
Driller:	Harrison & Cooper, Inc. Drilling	Project Name:	Vacuum jct. C-7		
Drilling Method:	Air rotary	Location:	Vacuum SWD System		
Start Date:	2-9-09		unit 'C' Sec.7 T18S, R35E		
End Date:	2-9-09		Lea County, NM		
Comments:					
Located: center of former junction box site					
TD = 30 ft GW = 100 ft					

Depth (feet)	chloride field tests	PID	Description	Lithology	Soil Bore Construction
15	148	105.1	10 - 30 ft VERY FINE TO FINE SAND dry		 bentonite seal
20	122	46.5			
25	87	4.4			
30	117	1.9			
DRO	<10, <10				
Lab Cl-	16				

COPY



**ARDINAL
LABORATORIES**

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: HACK CONDER
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (575) 397-1471

COPY

Receiving Date: 02/10/09
Reporting Date: 02/27/09**
Project Owner: NOT GIVEN
Project Name: VACUUM C-7
Project Location: NOT GIVEN

Sampling Date: 02/09/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ZL
Analyzed By: AB/HM

LAB NUMBER SAMPLE ID	GRO	DRO	Cl ⁻
	(C ₆ -C ₁₀) (mg/kg)	(>C ₁₀ -C ₂₈) (mg/kg)	(mg/kg)
ANALYSIS DATE	02/10/09	02/10/09	02/10/09
H16865-1 SB #1 @ 30'	<10.0	<10.0	16
Quality Control	549	562	500
True Value QC	500	500	500
% Recovery	110	112	100
Relative Percent Difference	3.0	7.1	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl⁻: Std. Methods 4500-Cl⁻B

*Analysis performed on a 1:4 w:v aqueous extract.

**Revised Report.

Clayton Keene
Chemist

02/27/09
Date

H16865 TCL RICE

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions; loss of use; or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Hansen, Edward J., EMNRD

From: Laura Pena <lpena@riceswd.com>
Sent: Monday, August 13, 2012 11:29 AM
To: Hansen, Edward J., EMNRD
Cc: Hack Conder; Katie Jones
Subject: FW: ROC - Vacuum Jct. C-7 (1R425-75) Photo Documentation
Attachments: Vacuum Jct. C-7 (1R425-75) Photo Documentation.pdf

Mr. Hansen,

Attached is the photo documentation resubmission of the Vacuum Jct. C-7 (1R425-75) site.

Thank you,
Laura

From: Laura Pena
Sent: Friday, August 03, 2012 3:47 PM
To: Edward J. Hansen, EMNRD
Cc: Hack Conder
Subject: ROC - Vacuum Jct. C-7 (1R425-75) Photo Documentation

Mr. Hansen,

Attached is the photo documentation for the Vacuum Jct. C-7 (1R425-75) site as requested.

Let Hack Conder or me know if you have any questions or require any additional information.

Thank you,

Laura Peña
Environmental Project Scientist
RICE Operating Company

Vacuum Jct. C-7 (1R425-75)
Unit C, Section 7, T17S, R35E



Facing northwest

3/3/2006



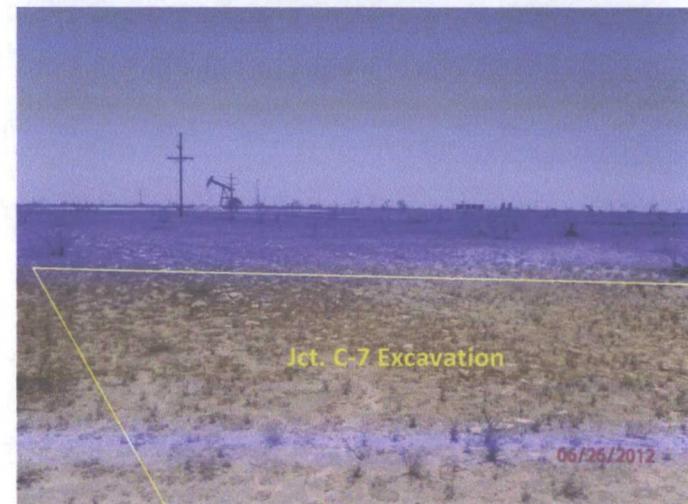
Facing north

3/6/2006



Facing northwest

6/26/2012



Facing southeast

6/26/2012