1R

# Annual GW Mon. REPORTS

DATE:
2000



March 23, 2011

RECHIVED

MAR 29 2011

Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Mr. Edward Hansen New Mexico Oil Conservation Division Environmental Bureau 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Re.

Plains All American - 2010 Annual Monitoring Reports

20 Sites in Lea County, New Mexico

Dear Mr. Hansen:

Plains All American is an operator of crude oil pipelines and terminal facilities in the state of New Mexico. Plains All American actively monitors certain historical release sites exhibiting groundwater impacts, consistent with assessments and work plans developed in-consultation with the New Mexico Oil Conservation Division (NMOCD). In accordance with the rules and regulations of the NMOCD, Plains All American hereby submits our Annual Monitoring reports for the following sites:

34 Junc. to Lea Sta. 1R-0386 /	Section 21, Township 20 South, Range 37 East, Lea County
34 Junction South 1R-0456 /	Section 02, Township 17 South, Range 36 East, Lea County
Bob Durham AP-0016	Section 32, Township 19 South, Range 37 East, Lea County
Darr Angell #1 AP-007	Section 11, Township 15 South, Range 37 East, Lea County
Darr Angell #2 AP-007 🗸	Section 11, Township 15 South, Range 37 East, Lea County
·	Section 14, Township 15 South, Range 37 East, Lea County
Darr Angell #4 AP-007 ✓	Section 11, Township 15 South, Range 37 East, Lea County
	Section 02, Township 15 South, Range 37 East, Lea County
Denton Station 1R-0234	Section 14, Township 15 South, Range 37 East, Lea County
HDO-90-23 AP-009 /	Section 06, Township 20 South, Range 37 East, Lea County
LF-59 1R-0103	Section 32, Township 19 South, Range 37 East, Lea County
Monument 2 ) 1R-0110	Section 06, Township 20 South, Range 37 East, Lea County
	Section 07, Township 20 South, Range 37 East, Lea, County
Monument 10 1R-0119	Section 30, Township 19 South, Range 37 East, Lea County
Monument 17 1R-123	Section 29, Township 19 South, Range 37 East, Lea County
Monument 18 1R-0124	Section 07, Township 20 South, Range 37 East, Lea County
S. Mon. Gath. Sour / 1R-951	Section 05, Township 20 South, Range 37 East, Lea County
SPS-11 GW-0140	Section 18, Township 18 South, Range 36 East, Lea County
Texaco Skelly F 1R-0420	Section 11, Township 21 South, Range 37 East, Lea County
TNM 97-04 GW-0294	Section 11, Township 16 South, Range 35 East, Lea County
TNM 97-17 AP-017	Section 21, Township 20 South, Range 37 East, Lea County
TNM 97-18 AP-0013	Section 28, Township 20 South, Range 37 East, Lea County
TNM 98-05A AP-12	Section 26, Township 21 South, Range 37 East, Lea County



Nova Safety and Environmental (Nova) prepared these documents and has vouched for their accuracy and completeness, and on behalf of Plains All American, I have personally reviewed the documents and interviewed Nova personnel in order to verify the accuracy and completeness of these documents. It is based upon these inquiries and reviews that Plains All American submits the enclosed Annual Monitoring Reports for the above facilities.

If you have any questions or require further information, please contact me at (575) 441-1099.

Sincerely.

bason Henry

Remediation Coordinator Plains All American

CC: Geoff Leking, NMOCD, Hobbs, NM

Enclosures



### 2010 ANNUAL MONITORING REPORT

### **TEXACO SKELLY F**

SW ¼ NW ¼ SECTION 21, TOWNSHIP 20 SOUTH, RANGE 37 EAST LEA COUNTY, NEW MEXICO PLAINS SRS NUMBER: 2002-11229 NMOCD Reference Number 1R-0420

### Prepared For:

PLAINS MARKETING, L.P. 333 CLAY STREET, SUITE 1600 HOUSTON, TEXAS 77002



Prepared By:

NOVA Safety and Environmental 2057 Commerce Street Midland, Texas 79703

March 2011

Ronald K. Rounsaville Senior Project Manager Brittan K. Byerly, P.G.

President

### TABLE OF CONTENTS

INTRODUCTION
SITE DESCRIPTION AND BACKGROUND INFORMATION1
FIELD ACTIVITIES1
LABORATORY RESULTS2
SUMMARY5
ANTICIPATED ACTIONS
LIMITATIONS5
DISTRIBUTION7
FIGURES Figure 1 – Site Location Map
Figure 2A – Inferred Groundwater Gradient Map – February 1, 2010 2B – Inferred Groundwater Gradient Map – May 4, 2010 2C – Inferred Groundwater Gradient Map – August 3, 2010 2D – Inferred Groundwater Gradient Map – November 2, 2010
Figure 3A – Groundwater Concentration and Inferred PSH Extent Map – February 1, 2010 3B – Groundwater Concentration and Inferred PSH Extent Map – May 4, 2010 3C – Groundwater Concentration and Inferred PSH Extent Map – August 3, 2010 3D – Groundwater Concentrations and Inferred PSH Extent Map – November 2, 2010
TABLES Table 1 – 2010 Groundwater Elevation Data Table 2 – 2010 Concentrations of BTEX and TPH in Groundwater Table 2 – 2010 Concentrations of PAH in Groundwater
APPENDICES Appendix A – Release Notification and Corrective Action (Form C-141)
ENCLOSED ON DATA DISK 2010 Annual Monitoring Report 2010 Tables 1, 2 and 3 – Groundwater Elevation, BTEX and PAH Concentration Data 2010 Figures 1, 2A-2D, and 3A-3D Electronic Copies of Laboratory Reports Historic Table 1 and 2 – Groundwater Elevation, BTEX and PAH Concentration Tables

### INTRODUCTION

On behalf of Plains Marketing, L.P. (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on May 29, 2004, project management responsibilities for the Texaco Skelly F Site (the site) were assumed by NOVA. The site, which was formerly the responsibility of Enron Oil Trading and Transportation (EOTT), is now the responsibility of Plains. This report is intended to be viewed as a complete document with text, figures, tables and appendices. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2010 only. However, historic data tables as well as 2010 laboratory analytical reports are presented on the enclosed data disk. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2010 to assess the levels and extent of dissolved phase constituents and Phase Separated Hydrocarbon (PSH). Each groundwater monitoring event consisted of measuring static water levels in monitor wells, checking for the presence of PSH on the water column and purging and sampling of each well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 foot were not sampled.

### SITE DESCRIPTION AND BACKGROUND INFORMATION

The legal description of the site is SW ¼ NW ¼ Section 21, Township 20 South, Range 37 East. The release was discovered by the Texas-New Mexico Pipeline Company (TNM) on the four-inch crude oil transportation line. No information is currently available documenting the discovery date, release volume or nature of the pipeline failure. The Release Notification and Corrective Action Form (C-141) are provided as Appendix B. A Geoprobe<sup>®</sup> Rig was utilized during the initial site investigation to delineate crude oil impacted soil. Laboratory analysis of soil samples collected during this initial stage of the investigation indicates that subsurface soil impacted by the crude oil release were limited to areas at and below the surface staining.

Nine groundwater monitor wells (MW-1 through MW-9) and two product recovery wells (RW-1 and RW-2) are currently onsite. Manual product recovery is being conducted weekly from recovery wells RW-1 and RW-2 and monitor wells MW-7 (when present) and MW-8.

### FIELD ACTIVITIES

### **Product Recovery Efforts**

A measurable thickness of PSH was detected in recovery wells RW-1 and RW-2 throughout the reporting period and at least during three monitoring events in monitor wells MW-7 and MW-8. A maximum thickness of 2.05 feet of PSH was detected in recovery well RW-2 on February 4, 2010. The average thickness of PSH exhibited in wells MW-7, MW-8, RW-1 and RW-2 was 0.33 feet. Groundwater Elevation data is provided as Table 1. Approximately 97 gallons (approximately 2.3 barrels) of PSH was recovered from the site during the 2010 reporting period. Approximately 1,469 gallons (approximately 35 barrels) of PSH has been recovered since project inception. To maximize product recovery efforts, Plains installed a solar recovery system during the 3<sup>rd</sup> quarter of 2009 which utilizes two total fluid pumps powered by two 12 volt solar

panels and a 12 volt wind turbine installed in recovery wells RW-1 and RW-2. The pumps operate on a cycle of approximately 3 minutes every 3 hours at an average pumping rate of approximately 2 gallons per minute.

### **Groundwater Monitoring**

Quarterly monitoring events for the reporting period were performed according to the following sampling schedule, which was approved by the NMOCD in correspondence dated April 28, 2004 and amended by NMOCD correspondence dated June 22, 2005.

NMOCD Approved Sampling Schedule					
MW-1	Annually				
MW-2	Annually				
MW-3	Annually				
MW-4	Quarterly				
MW-5	Annually				
MW-6	Annually				
MW-7	Quarterly				
MW-8	Quarterly				
MW-9	Quarterly				
RW-1	Quarterly				
RW-2	Quarterly				

The site monitor wells and recovery wells were gauged and sampled on February 1, May 4, August 3, and November 2, 2010. During each sampling event, sampled monitor wells were purged of a minimum of three well volumes of water or until the wells failed to produce water using a PVC bailer or electric Grundfos pump. Groundwater was allowed to recharge and samples were collected using disposable Teflon samplers. Water samples were placed in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of at a licensed disposal facility.

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during the four quarterly events, are depicted on Figures 2A through 2D, the Inferred Groundwater Gradient Maps. Groundwater elevation data for 2010 is provided as Table 1. Historic groundwater elevation data beginning at project inception is provided on the enclosed data disk.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0016 feet/foot to the south as measured between groundwater monitor wells MW-1 and MW-7. This is consistent with data presented on Figures 2A through 2C from earlier in the year. Corrected groundwater elevations ranged between 3,491.72 and 3,498.83 feet above mean sea level, in monitor well MW-4 on March 29, 2010 and recovery well RW-2 on July 9, 2010, respectively.

### LABORATORY RESULTS

Groundwater samples obtained during the quarterly sampling events of 2010 were delivered to Trace Analysis, Inc. in Midland, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method 8021B. Polynuclear Aromatic Hydrocarbons (PAH) analysis was not conducted during the 2010 calendar year. Based upon historic PAH analytical data, only those wells exhibiting elevated constituent concentrations

above WQCC standards are sampled, with the exclusion of those wells containing measurable PSH thicknesses. A listing of BTEX constituent concentrations for 2010 are summarized in Table 2 and the Historic PAH constituent concentrations are summarized in Table 3. Copies of the laboratory reports generated for 2010 are provided on the enclosed data disk. The quarterly groundwater sample results for BTEX constituent concentrations are depicted on Figures 3A through 3D.

Monitor well MW-1 is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standards of 0.01 mg/L for benzene, 0.75 mg/L for toluene, 0.75 mg/L for ethylbenzene and 0.62 for xylene, during the 4<sup>th</sup> quarter sampling event. Monitor well MW-1 has exhibited fifteen consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-2** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards. Monitor well MW-2 has exhibited fifteen consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-3** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards. Monitor well MW-3 has exhibited fifteen consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

Monitor well MW-4 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0150 mg/L during the 4<sup>th</sup> quarter to 0.0362 mg/L during the 1<sup>st</sup> quarter of 2010. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of the reporting period. Ethylbenzene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup> and 4<sup>th</sup> quarters to 0.0039 mg/L during the 3<sup>rd</sup> quarter of 2010. Ethylbenzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup> and 3<sup>rd</sup> quarters to 0.0079 mg/L during the 4<sup>th</sup> quarter of 2010. Xylene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-5** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. Monitor well MW-5 has exhibited fifteen consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-6** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. Monitor well MW-6 has exhibited eighteen consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

Monitor well MW-7 is sampled/monitored on a quarterly schedule. Monitor well MW-7 was not sampled during the first three quarters of the reporting period, due to the reported presence of PSH in the monitor well. PSH thicknesses of 0.34 feet, 0.11 feet and 0.07 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2010, respectively. Analytical results indicate a benzene concentration of 0.0345 mg/L during the 4<sup>th</sup> quarter of 2010. Benzene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period. Toluene, ethylbenzene and xylene concentrations were below the MDL and NMOCD regulatory standards during 4<sup>th</sup> quarter of 2010. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

Monitor well MW-8 is sampled/monitored on a quarterly schedule. Monitor well MW-8 was not sampled during the first three quarters of the reporting period, due to the reported presence of PSH in the monitor well. PSH thicknesses of 0.33 feet, 0.02 feet and 0.03 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2010, respectively. Benzene concentrations were 0.0065 mg/L during the 4<sup>th</sup> quarter of 2010. Benzene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period. Toluene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period. Ethylbenzene concentrations were 0.0082 mg/L during the 4<sup>th</sup> quarter of 2010. Ethylbenzene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period. Xylene concentrations were 0.0083 mg/L during the 4<sup>th</sup> quarter of 2010. Xylene concentrations were below NMOCD regulatory standards during 4<sup>th</sup> quarter of the reporting period. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-9** is sampled on a quarterly schedule. Analytical results indicate BTEX constituent concentrations were below the MDL and/or NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Recovery well RW-1** is monitored on a quarterly schedule. Recovery well RW-1 was not sampled during the reporting period, due to the reported presence of PSH in the monitor well. PSH thicknesses of 0.30 feet, 0.13 feet, 0.62 feet, and 0.66 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> quarters of 2010, respectively. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Recovery well RW-2** is monitored on a quarterly schedule. Recovery well RW-2 was not sampled during the reporting period, due to the reported presence of PSH in the monitor well. PSH thicknesses of 1.97 feet, 0.09 feet, 0.05 feet, and 0.11 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> quarters of 2010, respectively. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

Laboratory analytical results were compared to NMOCD regulatory limits based on the New Mexico groundwater standards found in section 20.6.2.3103 of the New Mexico Administrative Code.

### **SUMMARY**

This report presents the results of monitoring activities for the 2010 annual monitoring period. Nine groundwater monitor wells (MW-1 through MW-9) and two recovery wells (RW-1 and RW-2) are currently onsite. Manual product recovery is conducted twice weekly from monitor well MW-7 and MW-8. A solar powered recovery system is operational for recovery wells RW-1 and RW-2. Approximately 97 gallons (approximately 2.3 barrels) of PSH was recovered from the site during the 2010 reporting period. Approximately 1,469 gallons (approximately 35 barrels) of PSH has been recovered since project inception. The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0016 feet/foot to the south.

Review of the laboratory analytical results of the groundwater samples obtained during this annual reporting period indicate BTEX constituent concentrations were below the applicable NMOCD regulatory standards in six of the eleven monitor and recovery wells on site. Monitor wells MW-7 and MW-8 exhibited measurable PSH thicknesses during at least three quarter of the reporting period. Recovery wells RW-1 and RW-2 consistently exhibited measurable thicknesses of PSH during gauging events throughout 2010. Dissolved phase and phase separated hydrocarbon impact appears to be limited to monitor wells MW-4, MW-7 and MW-8 and recovery wells RW-1 and RW-2. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

### ANTICIPATED ACTIONS

Quarterly monitoring, PSH recovery (as necessary) and groundwater sampling will continue in 2011. Manual product recovery, along with the solar recovery system, and gauging will be conducted on a weekly schedule and will be adjusted according to site conditions. An Annual Monitoring Report will be submitted to the NMOCD before April 1, 2012.

Based on the results of the PAH analysis over the past several years, further PAH analysis will be conducted on samples from monitoring wells MW-7 and MW-8 and recovery wells RW-1 and RW-2 at such time when PSH is not present.

### **LIMITATIONS**

NOVA has prepared this Annual Monitoring Report to the best of its ability. No other warranty, expressed or implied, is made or intended.

NOVA has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. NOVA has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of NOVA and/or Plains.

### **DISTRIBUTION**

Copy 1 Ed Hansen

New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Drive

Santa Fe, NM 87505

Copy 2: Geoffrey R. Leking

New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division, District 1

1625 French Drive Hobbs, NM 88240

Copy 3: Jason Henry

Plains Marketing, L.P. 2530 State Highway 214 Denver City, TX 79323 jhenry@paalp.com

Copy 4: Jeff Dann

Plains Marketing, L.P.

333 Clay Street Suite 1600

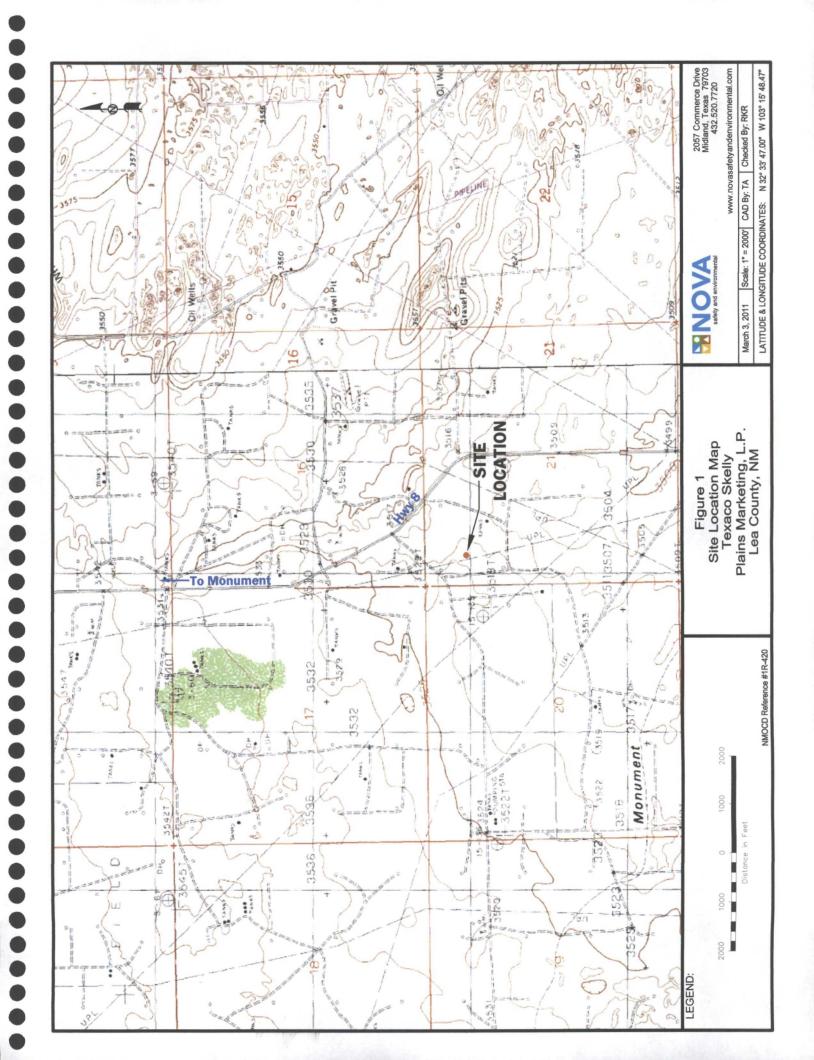
Houston, TX 77002 jpdann@paalp.com

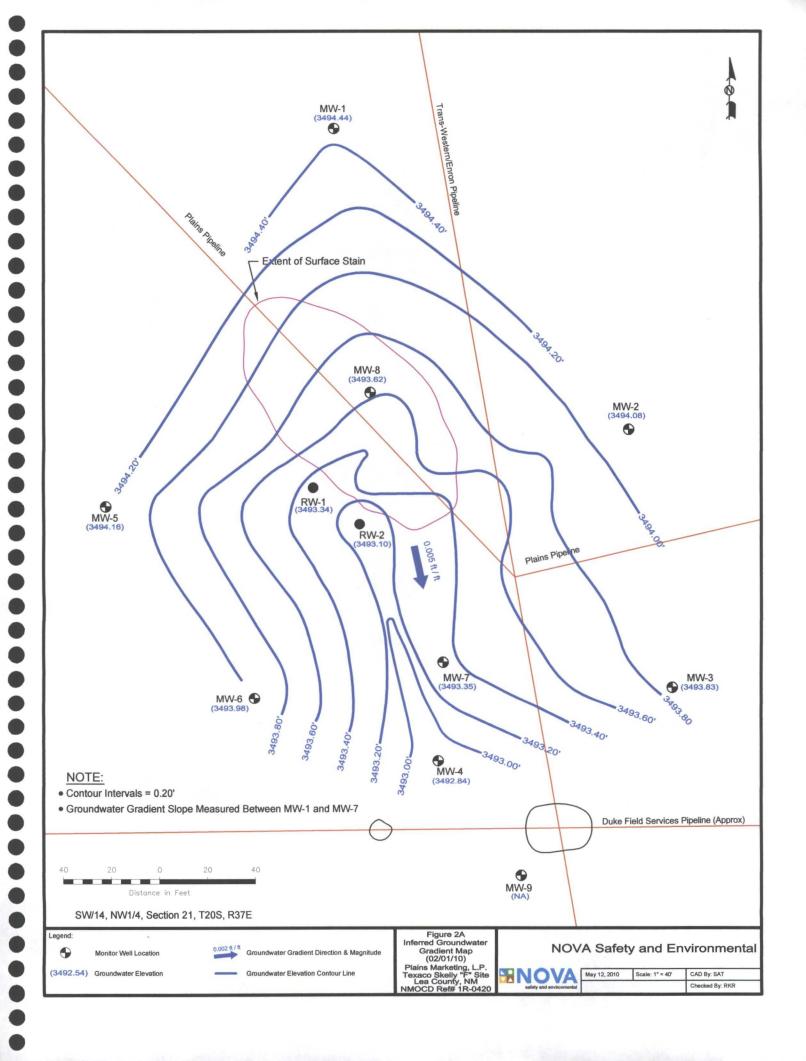
Copy 5: NOVA Safety and Environmental

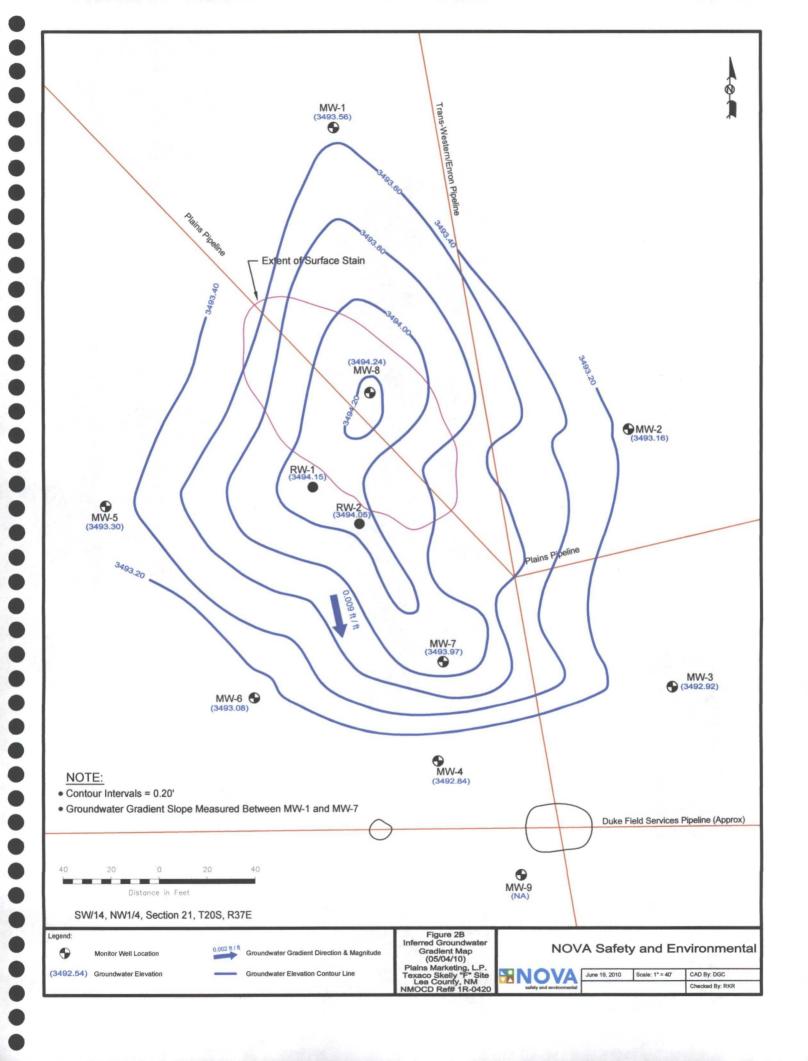
2057 Commerce Street Midland, TX 79703

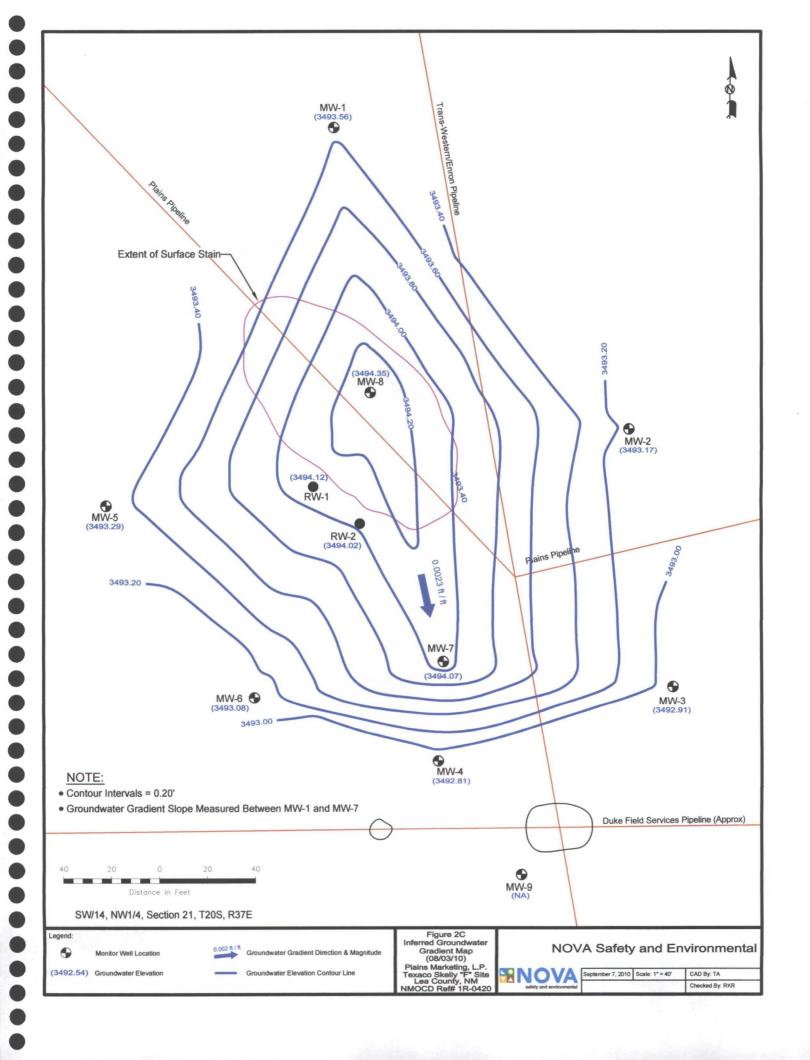
rrounsaville@novatraining.cc

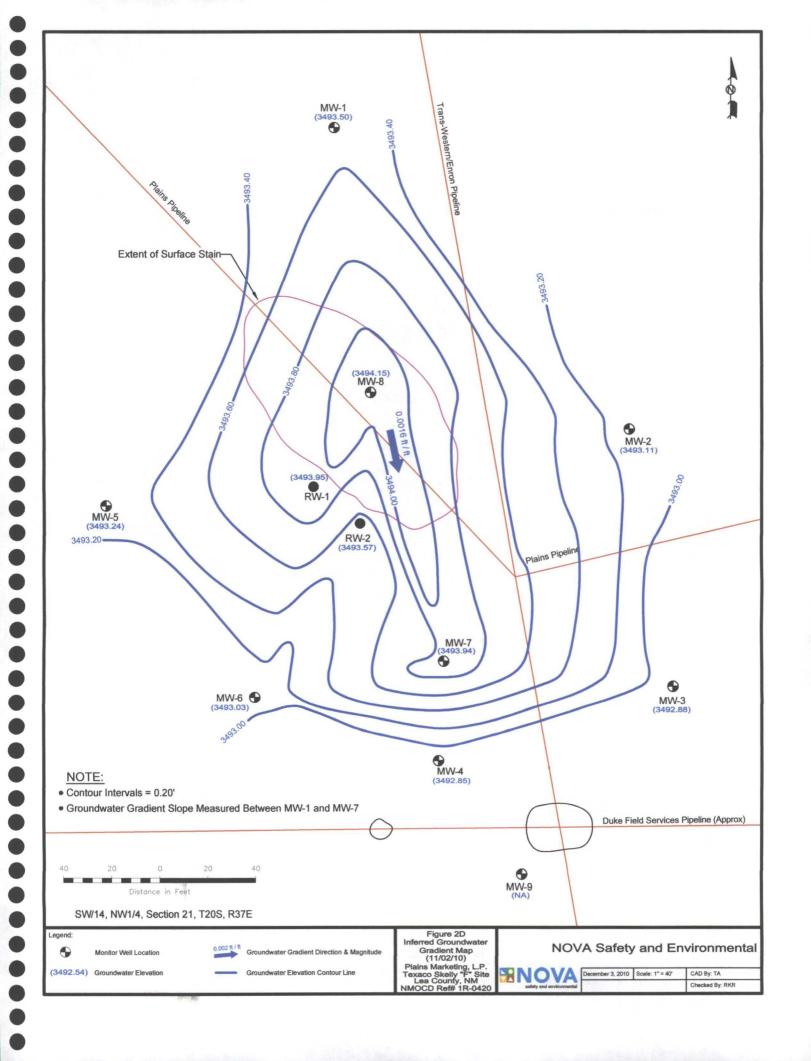
Figures

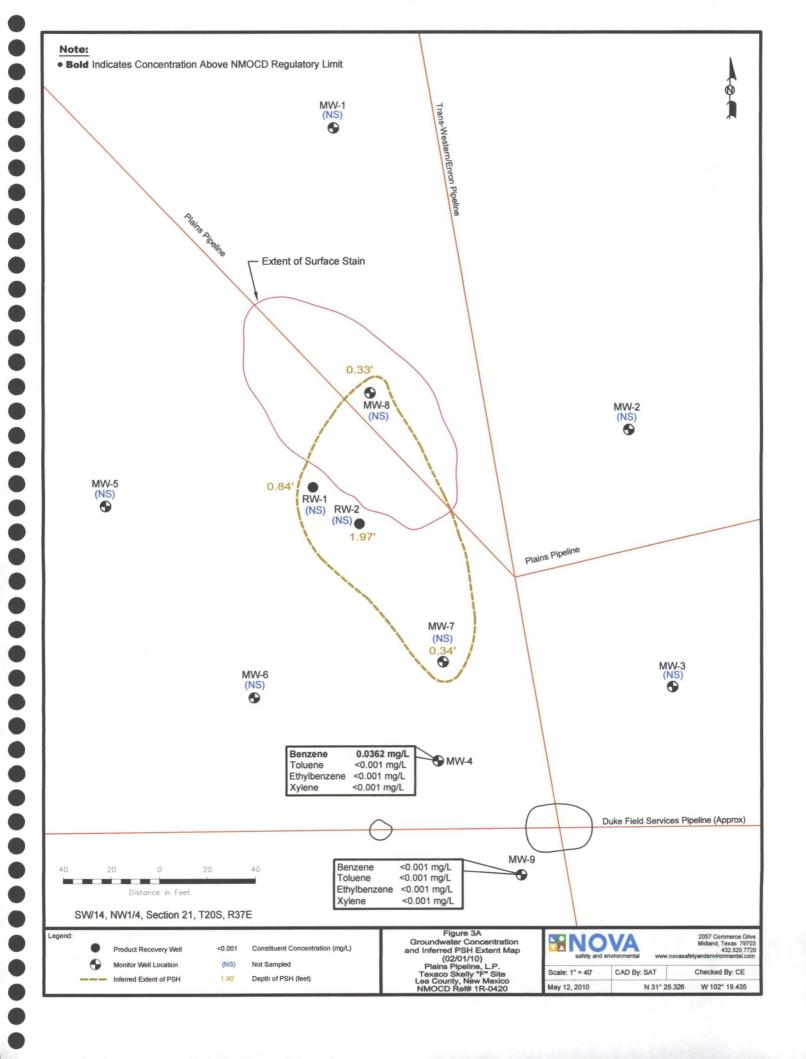


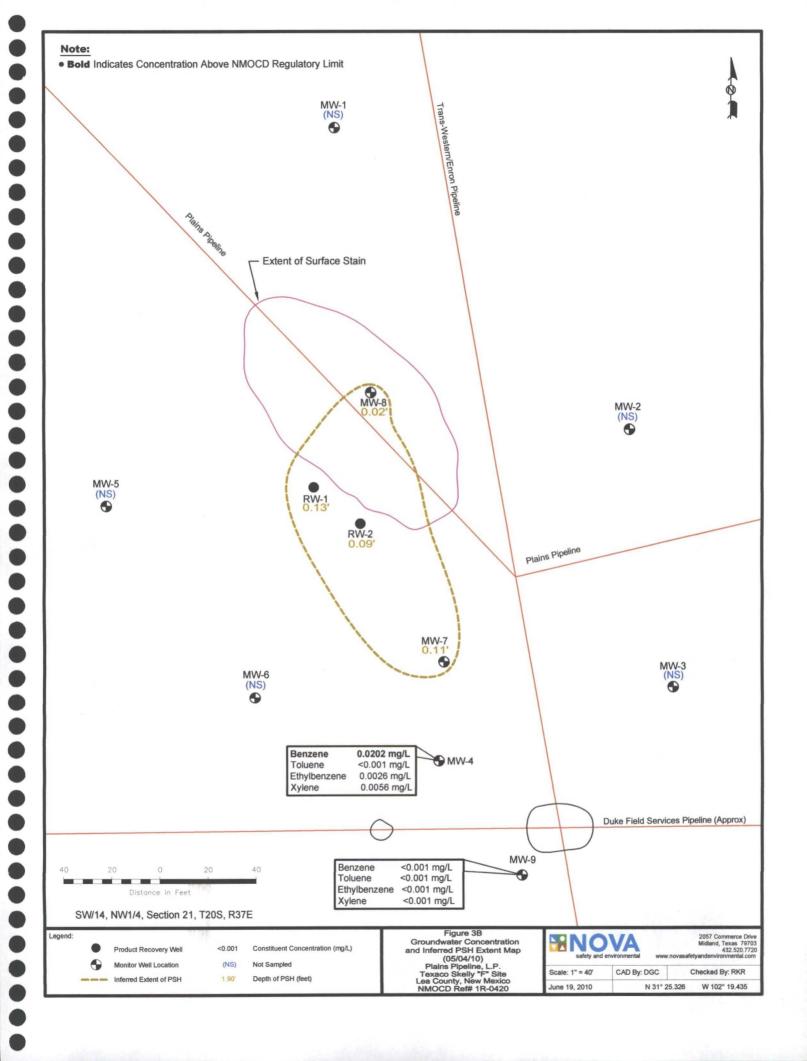


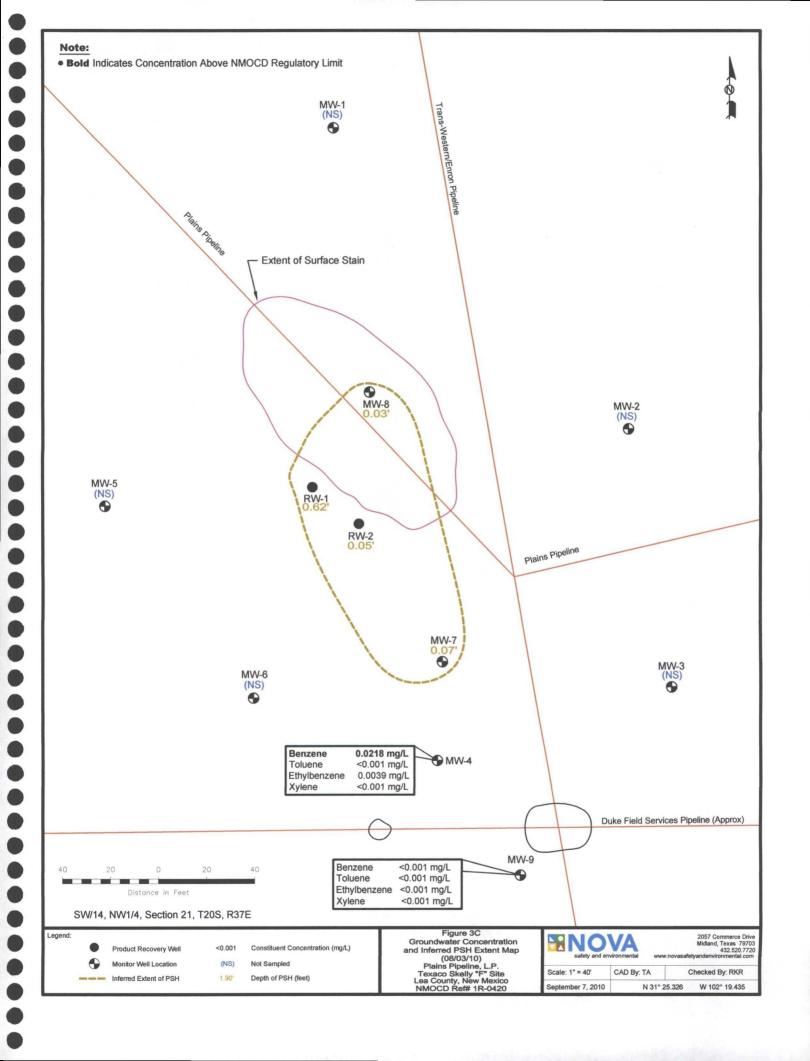


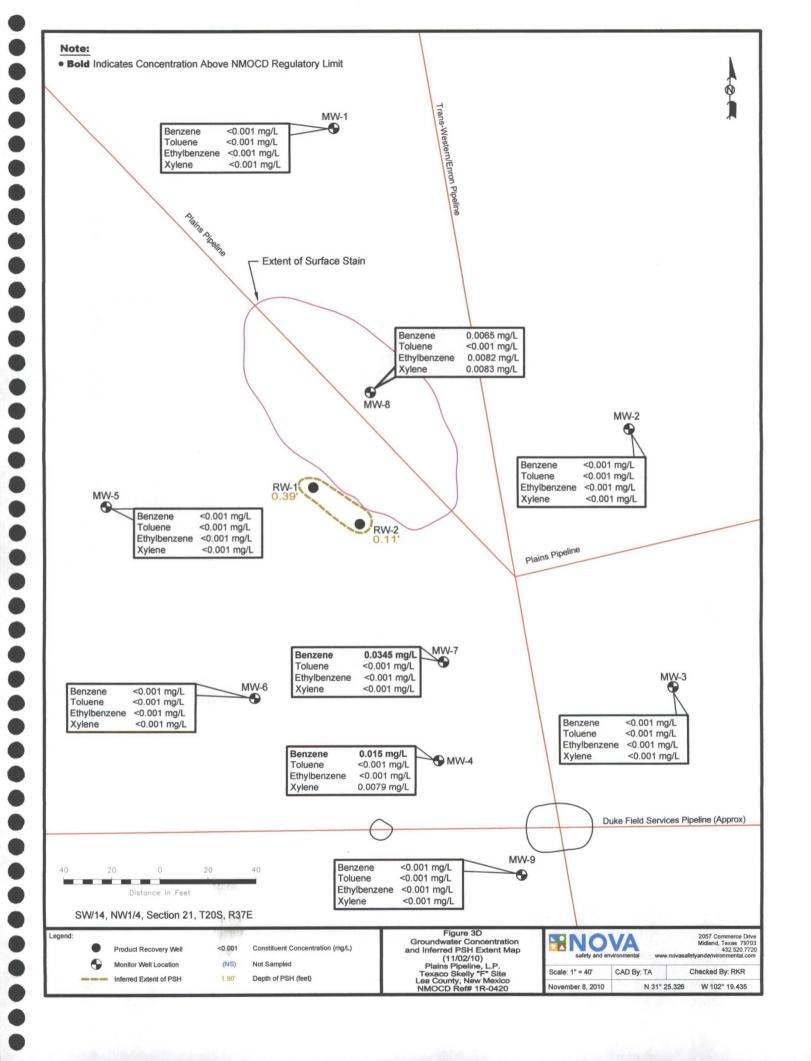


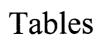












### **GROUNDWATER ELEVATION TABLE - 2010**

Well Number	Date Measured	Top of Casing Elevation	Depth to product	Depth to Water	PSH thickness	Corrected Groundwater Elevation
MW - 1	01/04/10	3521.04	-	27.28	0.00	3493.76
MW - 1	02/01/10	3521.04	-	26.60	0.00	3494.44
MW - 1	05/04/10	3521.04	-	27.48	0.00	3493.56
MW - 1	08/03/10	3521.04	-	27.48	0.00	3493.56
MW - 1	11/02/10	3521.04	-	27.54	0.00	3493.50
	And Additional Co.		2007		4.545 (B. 1.5.)	
MW - 2	01/04/10	3518.80	-	25.45	0.00	3493.35
MW - 2	02/01/10	3518.80	<u> </u>	24.72	0.00	3494.08
MW - 2	05/04/10	3518.80	-	25.64	0.00	3493.16
MW - 2	08/03/10	3518.80	_	25.63	0.00	3493.17
MW - 2	11/02/10	3518.80	_	25.69	0.00	3493.11
				Herris.		in indicate a
MW - 3	01/04/10	3520.52	-	27.38	0.00	3493.14
MW - 3	02/01/10	3520.52	-	26.69	0.00	3493.83
MW - 3	05/04/10	3520.52	-	27.60	0.00	3492.92
MW - 3	08/03/10	3520.52	_	27.61	0.00	3492.91
MW - 3	11/02/10	3520.52	-	27.64	0.00	3492.88
			Contract of the Contract of th	The second of the second	and the Composite of	ti i i engana atau i i i i i i i i i i i i i i i i i i i
MW - 4	01/04/10	3519.91	_	27.79	0.00	3492.12
MW - 4	01/14/10	3519.91	-	27.76	0.00	3492.15
MW - 4	01/19/10	3519.91	-	27.67	0.00	3492.24
MW - 4	01/22/10	3519.91	-	27.65	0.00	3492.26
MW - 4	02/01/10	3519.91	-	27.07	0.00	3492.84
MW - 4	02/04/10	3519.91	-	27.67	0.00	3492.24
MW - 4	02/19/10	3519.91	-	27.54	0.00	3492.37
MW - 4	02/26/10	3519.91	-	27.51	0.00	3492.40
MW - 4	03/01/10	3519.91		27.52	0.00	3492.39
MW - 4	03/04/10	3519.91	-	27.47	0.00	3492.44
MW - 4	03/09/10	3519.91	-	27.42	0.00	3492.49
MW - 4	03/11/10	3519.91	-	27.45	0.00	3492.46
MW - 4	03/15/10	3519.91	-	27.39	0.00	3492.52
MW - 4	03/17/10	3519.91	-	27.30	0.00	3492.61
MW - 4	03/22/10	3519.91	-	27.23	0.00	3492.68
MW - 4	03/23/10	3519.91	-	27.27	0.00	3492.64
MW - 4	03/29/10	3519.91	-	28.19	0.00	3491.72
MW - 4	04/05/10	3519.91	-	27.21	0.00	3492.70
MW - 4	04/08/10	3519.91		27.11	0.00	3492.80
MW - 4	04/14/10	3519.91	-	27.20	0.00	3492.71
MW - 4	04/16/10	3519.91	1	27.07	0.00	3492.84
MW - 4	04/22/10	3519.91	•	27.11	0.00	3492.80
MW - 4	04/26/10	3519.91	-	27.15	0.00	3492.76
MW - 4	04/28/10	3519.91	<u>-</u>	27.10	0.00	3492.81
MW - 4	04/30/10	3519.91	-	27.14	0.00	3492.77
MW - 4	05/04/10	3519.91	-	27.07	0.00	3492.84

### **GROUNDWATER ELEVATION TABLE - 2010**

Well Number	Date Measured	Top of Casing Elevation	Depth to product	Depth to Water	PSH thickness	Corrected Groundwater Elevation
MW - 4	05/05/10	3519.91	-	27.00	0.00	3492.91
MW - 4	05/13/10	3519.91		27.01	0.00	3492.90
MW - 4	05/14/10	3519.91	_	27.07	0.00	3492.84
MW - 4	05/19/10	3519.91	-	27.03	0.00	3492.88
MW - 4	05/24/10	3519.91	-	27.01	0.00	3492.90
MW - 4	05/28/10	3519.91	-	27.14	0.00	3492.77
MW - 4	06/04/10	3519.91	-	27.03	0.00	3492.88
MW - 4	06/09/10	3519.91	-	27.34	0.00	3492.57
MW - 4	06/10/10	3519.91	-	27.36	0.00	3492.55
MW - 4	06/16/10	3519.91	-	27.41	0.00	3492.50
MW - 4	06/24/10	3519.91	-	27.53	0.00	3492.38
MW - 4	06/29/10	3519.91	-	27.62	0.00	3492.29
MW - 4	07/09/10	3519.91	-	27.30	0.00	3492.61
MW - 4	07/13/10	3519.91	-	27.21	0.00	3492.70
MW - 4	07/19/10	3519.91	-	27.10	0.00	3492.81
MW - 4	07/28/10	3519.91	-	27.01	0.00	3492.90
MW - 4	08/03/10	3519.91	-	27.10	0.00	3492.81
MW - 4	08/04/10	3519.91	-	26.98	0.00	3492.93
MW - 4	08/19/10	3519.91	-	26.94	0.00	3492.97
MW - 4	08/27/10	3519.91	-	26.99	0.00	3492.92
MW - 4	08/31/10	3519.91	-	27.02	0.00	3492.89
MW - 4	09/09/10	3519.91	-	27.09	0.00	3492.82
MW - 4	09/17/10	3519.91	-	26.98	0.00	3492.93
MW - 4	10/01/10	3519.91	-	27.08	0.00	3492.83
MW - 4	10/04/10	3519.91	-	27.06	0.00	3492.85
MW - 4	10/13/10	3519.91	-	27.13	0.00	3492.78
MW - 4	10/19/10	3519.91	-	27.05	0.00	3492.86
MW - 4	10/27/10	3519.91	-	27.04	0.00	3492.87
MW - 4	11/02/10	3519.91	-	27.06	0.00	3492.85
MW - 4	11/05/10	3519.91	-	27.09	0.00	3492.82
MW - 4	11/10/10	3519.91	-	27.20	0.00	3492.71
MW - 4	11/19/10	3519.91	-	27.14	0.00	3492.77
MW - 4	12/01/10	3519.91	_	26.92	0.00	3492.99
MW - 4	12/09/10	3519.91	-	26.91	0.00	3493.00
MW - 4	12/13/10	3519.91		27.05	0.00	3492.86
		The state of the s	ម៉ូត្រូវប្រជាជនមកកិច្ចនេះ និង ១៩២៣១ ក្នុ កិច្ចក្រុមប្រជាជនមកកិច្ចកិច្ចកិច្ចកិច្ចកិច្ចកិច្ចកិច្ចកិច	anneadaire da Frain Lighthail		
MW - 5	01/04/10	3519.62	-	26.07	0.00	3493.55
MW - 5	02/01/10	3519.62	-	25.46	0.00	3494.16
MW - 5	05/04/10	3519.62	-	26.32	0.00	3493.30
MW - 5	08/03/10	3519.62	-	26.33	0.00	3493.29
MW - 5	11/02/10	3519.62	-	26.38	0.00	3493.24
	. Visit in the second	Side Control of the Control of the Park		PRODUCTION OF A STATE		

### **GROUNDWATER ELEVATION TABLE - 2010**

Well Number	Date Measured	Top of Casing Elevation	Depth to product	Depth to Water	PSH thickness	Corrected Groundwater Elevation
MW - 6	01/04/10	3520.71	- '	27.43	0.00	3493.28
MW - 6	02/01/10	3520.71	-	26.73	. 0.00	3493.98
MW - 6	05/04/10	3520.71	-	27.63	0.00	3493.08
MW - 6	08/03/10	3520.71	_	27.63	0.00	3493.08
MW - 6	11/02/10	3520.71	_	27.68	0.00	3493.03
				The second second		
MW - 7	01/04/10	3521.02	27.71	28.28	0.57	3493.22
MW - 7	01/14/10	3521.02	27.70	28.17	0.47	3493.25
MW - 7	01/19/10	3521.02	27.61	27.94	0.33	3493.36
MW - 7	01/22/10	3521.02	27.60	27.97	0.37	3493.36
MW - 7	02/01/10	3521.02	27.62	27.96	0.34	3493.35
MW - 7	02/04/10	3521.02	27.55	28.04	0.49	3493.40
MW - 7	02/12/10	3521.02	27.50	27.98	0.48	3493.45
MW - 7	02/19/10	3521.02	27.47	27.70	0.23	3493.52
MW - 7	02/26/10	3521.02	27.48	27.67	0.19	3493.51
MW - 7	03/01/10	3521.02	27.48	27.66	0.18	3493.51
MW - 7	03/04/10	3521.02	27.43	27.62	0.19	3493.56
MW - 7	03/09/10	3521.02	27.41	27.61	0.20	3493.58
MW - 7	03/11/10	3521.02	27.40	27.60	0.20	3493.59
MW - 7	03/15/10	3521.02	27.35	27.58	0.23	3493.64
MW - 7	03/17/10	3521.02	27.26	27.44	0.18	3493.73
MW - 7	03/22/10	3521.02	27.18	27.39	0.21	3493.81
MW - 7	03/23/10	3521.02	27.23	27.42	0.19	3493.76
MW - 7	03/29/10	3521.02	27.13	27.34	0.21	3493.86
MW - 7	04/05/10	3521.02	27.16	27.34	0.18	3493.83
MW - 7	04/08/10	3521.02	27.12	27.25	0.13	3493.88
MW - 7	04/14/10	3521.02	27.22	27.35	0.13	3493.78
MW - 7	04/16/10	3521.02	27.15	27.30	0.15	3493.85
MW - 7	04/22/10	3521.02	27.08	27.23	0.15	3493.92
MW - 7	04/26/10	3521.02	27.12	27.28	0.16	3493.88
MW - 7	04/28/10	3521.02	27.09	27.19	0.10	3493.92
MW - 7	04/30/10	3521.02	27.07	27.17	0.10	3493.94
MW - 7	05/04/10	3521.02	26.94	27.05	0.11	3493.97
MW - 7	05/05/10	3521.02	-	26.97	0.00	3494.05
MW - 7	05/13/10	3521.02	-	26.95	0.00	3494.07
MW - 7	05/14/10	3521.02	-	27.03	0.00	3493.99
MW - 7	05/19/10	3521.02	-	26.94	0.00	3494.08
MW - 7	05/24/10	3521.02	-	26.96	0.00	3494.06
MW - 7	05/28/10	3521.02	-	27.12	0.00	3493.90
MW - 7	06/04/10	3521.02	-	26.95	0.00	3494.07
MW - 7	06/09/10	3521.02	-	27.32	0.00	3493.70
MW - 7	06/10/10	3521.02	-	27.30	0.00	3493.72
MW - 7	06/16/10	3521.02	-	27.38	0.00	3493.64

### **GROUNDWATER ELEVATION TABLE - 2010**

Well Number	Date Measured	Top of Casing Elevation	Depth to product	Depth to Water	PSH thickness	Corrected Groundwater Elevation
MW - 7	06/24/10	3521.02	-	27.50	0.00	3493.52
MW - 7	06/29/10	3521.02	27.58	27.61	0.03	3493.44
MW - 7	07/09/10	3521.02	27.28	27.30	0.02	3493.74
MW - 7	07/13/10	3521.02	27.17	27.20	0.03	3493.85
MW - 7	07/19/10	3521.02	27.00	27.07	0.07	3494.01
MW - 7	07/28/10	3521.02	26.92	26.98	0.06	3494.09
MW - 7	08/03/10	3521.02	26.88	26.95	0.07	3494.07
MW - 7	08/04/10	3521.02	26.88	26.92	0.04	3494.13
MW - 7	08/19/10	3521.02		26.94	0.00	3494.08
MW - 7	08/27/10	3521.02	J	26.96	0.00	3494.06
MW - 7	08/31/10	3521.02		26.98	0.00	3494.04
MW - 7	09/09/10	3521.02	-	27.07	0.00	3493.95
MW - 7	09/17/10	3521.02	-	26.95	0.00	3494.07
MW - 7	10/01/10	3521.02	-	27.07	0.00	3493.95
MW - 7	10/04/10	3521.02	-	27.05	0.00	3493.97
MW - 7	10/13/10	3521.02	-	27.10	0.00	3493.92
MW - 7	10/19/10	3521.02	-	27.07	0.00	3493.95
MW - 7	10/27/10	3521.02	-	27.07	0.00	3493.95
MW - 7	11/02/10	3521.02	_	27.08	0.00	3493.94
MW - 7	11/05/10	3521.02	-	27.06	0.00	3493.96
MW - 7	11/10/10	3521.02	-	27.14	0.00	3493.88
MW - 7	11/19/10	3521.02	-	27.16	0.00	3493.86
MW - 7	12/01/10	3521.02	-	26.97	0.00	3494.05
MW - 7	12/09/10	3521.02	-	26.89	0.00	3494.13
MW - 7	12/13/10	3521.02	-	27.07	0.00	3493.95
Total Contract	i dan barah ganasan li bagai ka			man purpose and the second		Commission State (March 1997)
MW - 8	01/04/10	3519.78	26.19	26.60	0.41	3493.53
MW - 8	01/14/10	3519.78	26.15	26.74	0.59	3493.54
MW - 8	01/19/10	3519.78	26.10	26.44	0.34	3493.63
MW - 8	01/22/10	3519.78	26.08	26.47	0.39	3493.64
MW - 8	02/01/10	3519.78	26.11	26.44	0.33	3493.62
MW - 8	02/04/10	3519.78	26.06	26.69	0.63	3493.63
MW - 8	02/12/10	3519.78	26.06	26.43	0.37	3493.66
MW - 8	02/19/10	3519.78	25.96	26.34	0.38	3493.76
MW - 8	02/26/10	3519.78	25.97	26.33	0.36	3493.76
MW - 8	03/01/10	3519.78	25.98	26.17	0.19	3493.77
MW - 8	03/04/10	3519.78	25.95	26.10	0.15	3493.81
MW - 8	03/09/10	3519.78	25.89	26.07	0.18	3493.86
MW - 8	03/11/10	3519.78	25.89	25.99	0.10	3493.88
MW - 8	03/15/10	3519.78	25.83	25.91	0.08	3493.94
MW - 8	03/17/10	3519.78	25.72	25.76	0.04	3494.05
MW - 8	03/22/10	3519.78	25.69	25.76	0.07	3494.08
MW - 8	03/23/10	3519.78	25.73	25.80	0.07	3494.04
MW - 8	03/29/10	3519.78	25.64	25.69	0.05	3494.13

### **GROUNDWATER ELEVATION TABLE - 2010**

Well Number	Date Measured	Top of Casing Elevation	Depth to product	Depth to Water	PSH thickness	Corrected Groundwater Elevation
MW - 8	04/05/10	3519.78	_	25.70	0.00	3494.08
MW - 8	04/08/10	3519.78	-	25.60	0.00	3494.18
MW - 8	04/14/10	3519.78	_	25.68	0.00	3494.10
MW - 8	04/16/10	3519.78	-	25.63	0.00	3494.15
MW - 8	04/22/10	3519.78	-	25.61	0.00	3494.17
MW - 8	04/26/10	3519.78	-	25.64	0.00	3494.14
MW - 8	04/28/10	3519.78	25.59	25.61	0.02	3494.19
MW - 8	04/30/10	3519.78	25.56	25.59	0.03	3494.22
MW - 8	05/04/10	3519.78	25.52	25.54	0.02	3494.24
MW - 8	05/05/10	3519.78	-	25.45	0.00	3494.33
MW - 8	05/13/10	3519.78	_	25.47	0.00	3494.31
MW - 8	05/14/10	3519.78	_	25.51	0.00	3494.27
MW - 8	05/19/10	3519.78	-	25.46	0.00	3494.32
MW - 8	05/24/10	3519.78	-	25.44	0.00	3494.34
MW - 8	05/28/10	3519.78	-	25.62	0.00	3494.16
MW - 8	06/04/10	3519.78	-	25.46	0.00	3494.32
MW - 8	06/09/10	3519.78	-	25.79	0.00	3493.99
MW - 8	06/10/10	3519.78		25.82	0.00	3493.96
MW - 8	06/16/10	3519.78		25.88	0.00	3493.90
MW - 8	06/24/10	3519.78	-	26.02	0.00	3493.76
MW - 8	06/29/10	3519.78	-	26.11	0.00	3493.67
MW - 8	07/09/10	3519.78	-	25.79	0.00	3493.99
MW - 8	07/13/10	3519.78	_	25.66	0.00	3494.12
MW - 8	07/19/10	3519.78	25.53	25.55	0.02	3494.25
MW - 8	07/28/10	3519.78	25.41	25.44	0.03	3494.37
MW - 8	08/03/10	3519.78	25.40	25.43	0.03	3494.35
MW - 8	08/04/10	3519.78	25.41	25.42	0.01	3494.37
MW - 8	08/19/10	3519.78		25.41	0.00	3494.37
MW - 8	08/27/10	3519.78	-	25.44	0.00	3494.34
MW - 8	08/31/10	3519.78	-	25.42	0.00	3494.36
MW - 8	09/09/10	3519.78	-	25.56	0.00	3494.22
MW - 8	09/17/10	3519.78		25.43	0.00	3494.35
MW - 8	10/01/10	3519.78	-	25.56	0.00	3494.22
MW - 8	10/04/10	3519.78	-	25.58	0.00	3494.20
MW - 8	10/13/10	3519.78	-	25.58	0.00	3494.20
MW - 8	10/19/10	3519.78	-	25.59	0.00	3494.19
MW - 8	10/27/10	3519.78	-	25.60	0.00	3494.18
MW - 8	11/02/10	3519.78	-	25.63	0.00	3494.15
MW - 8	11/05/10	3519.78	-	25.53	0.00	3494.25
MW - 8	11/10/10	3519.78	-	25.61	0.00	3494.17
MW - 8	11/19/10	3519.78	_	25.58	0.00	3494.20
MW - 8	12/01/10	3519.78	-	25.45	0.00	3494.33
MW - 8	12/09/10	3519.78	-	25.48	0.00	3494.30
MW - 8	12/13/10	3519.78	_	25.64	0.00	3494.14
TOTAL PARTY.			100000000000000000000000000000000000000	Ampali Jules D. Commission Company	of the second	A TOTAL STREET

### **GROUNDWATER ELEVATION TABLE - 2010**

Well Number	Date Measured	Top of Casing Elevation	Depth to product	Depth to Water	PSH thickness	Corrected Groundwater Elevation
MW - 9	01/04/10		-	27.19	0.00	
MW - 9	02/01/10		_	26.53	0.00	
MW - 9	05/04/10		- "	26.42	0.00	
MW - 9	08/03/10		-	26.42	0.00	
MW - 9	11/02/10		-	27.45	0.00	
		Hallander and Mill Control of	7000			
RW - 1	01/04/10	3519.68	26.76	26.84	0.08	3492.91
RW - 1	02/01/10	3519.68	26.21	27.05	0.84	3493.34
RW - 1	02/04/10	3519.68	26.08	26.92	0.84	3493.47
RW - 1	02/12/10	3519.68	26.02	26.45	0.43	3493.60
RW - 1	02/19/10	3519.68	25.92	26.24	0.32	3493.71
RW - 1	02/26/10	3519.68	25.96	26.32	0.36	3493.67
RW - 1	03/01/10	3519.68	25.98	26.19	0.21	3493.67
RW - 1	03/04/10	3519.68	25.92	26.10	0.18	3493.73
RW - 1	03/09/10	3519.68	25.84	26.03	0.19	3493.81
RW - 1	03/11/10	3519.68	25.86	25.96	0.10	3493.81
RW - 1	03/15/10	3519.68	25.85	25.92	0.07	3493.82
RW - 1	03/17/10	3519.68	25.70	25.81	0.11	3493.96
RW - 1	03/22/10	3519.68	25.69	25.85	0.16	3493.97
RW - 1	03/23/10	3519.68	25.72	25.95	0.23	3493.93
RW - 1	03/29/10	3519.68	25.59	25.91	0.32	3494.04
RW - 1	04/05/10	3519.68	25.62	25.90	0.28	3494.02
RW - 1	04/08/10	3519.68	25.58	25.72	0.14	3494.08
RW - 1	04/14/10	3519.68	25.64	25.88	0.24	3494.00
RW - 1	04/16/10	3519.68	25.50	25.64	0.14	3494.16
RW - 1	04/22/10	3519.68	25.52	25.70	0.18	3494.13
RW - 1	04/26/10	3519.68	25.58	25.76	0.18	3494.07
RW - 1	04/28/10	3519.68	25.88	25.98	0.10	3493.79
RW - 1	04/30/10	3519.68	25.55	25.65	0.10	3494.12
RW - 1	05/04/10	3519.68	25.51	25.64	0.13	3494.15
RW - 1	05/05/10	3519.68	25.42	25.65	0.23	3494.23
RW - 1	05/13/10	3519.68	25.44	25.65	0.21	3494.21
RW - 1	05/14/10	3519.68	25.51	25.64	0.13	3494.15
RW - 1	05/19/10	3519.68	25.43	25.66	0.23	3494.22
RW - 1	05/24/10	3519.68	25.43	25.65	0.22	3494.22
RW - 1	05/28/10	3519.68	25.58	25.76	0.18	3494.07
RW - 1	06/04/10	3519.68	25.47	25.57	0.10	3494.20
RW - 1	06/09/10	3519.68	25.80	25.84	0.04	3493.87
RW - 1	06/10/10	3519.68	25.76	25.88	0.12	3493.90
RW - 1	06/16/10	3519.68	25.86	25.95	0.09	3493.81
RW - 1	06/24/10	3519.68	25.98	26.03	0.05	3493.69
RW - 1	06/29/10	3519.68	26.05	26.34	0.29	3493.59
RW - 1	07/09/10	3519.68	25.61	26.36	0.75	3493.96
RW - 1	07/13/10	3519.68	25.61	26.25	0.64	3493.97

### **GROUNDWATER ELEVATION TABLE - 2010**

Well Number	Date Measured	Top of Casing Elevation	Depth to product	Depth.to Water	PSH thickness	Corrected Groundwater Elevation
RW - 1	07/19/10	3519.68	25.44	26.20	0.76	3494.13
RW - 1	07/28/10	3519.68	25.37	26.20	0.83	3494.19
RW - 1	08/03/10	3519.68	25.47	26.09	0.62	3494.12
RW - 1	08/04/10	3519.68	25.31	26.00	0.69	3494.27
RW - 1	08/19/10	3519.68	25.31	26.11	0.80	3494.25
RW - 1	08/27/10	3519.68	25.36	26.02	0.66	3494.22
RW - I	08/31/10	3519.68	25.40	26.03	0.63	3494.19
RW - 1	09/17/10	3519.68	25.44	26.08	0.64	3494.14
RW - 1	10/13/10	3519.68	25.47	26.09	0.62	3494.12
RW - 1	11/02/10	3519.68	25.63	26.29	0.66	3493.95
RW - 1	11/05/10	3519.68	25.48	26.01	0.53	3494.12
RW - 1	11/10/10	3519.68	25.50	26.50	1.00	3494.03
RW - 1	11/19/10	3519.68	25.52	26.47	0.95	3494.02
RW - 1	12/01/10	3519.68	25.47	26.01	0.54	3494.13
RW - 1	12/09/10	3519.68	25.40	26.05	0.65	3494.18
	india a superior		William Inc.		All of the second of the secon	
RW - 2	01/04/10	3520.24	26.87	28.10	1.23	3493.19
RW - 2	02/01/10	3520.24	26.84	28.81	1.97	3493.10
RW - 2	02/04/10	3520.24	26.62	28.67	2.05	3493.31
RW - 2	02/12/10	3520.24	26.56	27.73	1.17	3493.50
RW - 2	02/19/10	3520.24	26.57	27.66	1.09	3493.51
RW - 2	02/26/10	3520.24	26.51	27.56	1.05	3493.57
RW - 2	03/01/10	3520.24	26.61	27.00	0.39	3493.57
RW - 2	03/04/10	3520.24	26.51	26.89	0.38	3493.67
RW - 2	03/09/10	3520.24	26.44	26.95	0.51	3493.72
RW - 2	03/11/10	3520.24	26.48	26.72	0.24	3493.72
RW - 2	03/15/10	3520.24	26.53	26.95	0.42	3493.65
RW - 2	03/17/10	3520.24	26.35	26.47	0.12	3493.87
RW - 2	03/22/10	3520.24	26.39	26.56	0.17	3493.82
RW - 2	03/23/10	3520.24	26.37	26.60	0.23	3493.84
RW - 2	03/29/10	3520.24	26.24	26.50	0.26	3493.96
RW - 2	04/05/10	3520.24	26.29	26.45	0.16	3493.93
RW - 2	04/08/10	3520.24	26.19	26.30	0.11	3494.03
RW - 2	04/14/10	3520.24	26.24	26.52	0.28	3493.96
RW - 2	04/16/10	3520.24	26.14	26.22	0.08	3494.09
RW - 2	04/22/10	3520.24	26.16	26.43	0.27	3494.04
RW - 2	04/26/10	3520.24	26.18	26.48	0.30	3494.02
RW - 2	04/28/10	3520.24	26.74	26.98	0.24	3493.46
RW - 2	04/30/10	3520.24	26.19	26.29	0.10	3494.04
RW - 2	05/04/10	3520.24	26.18	26.27	0.09	3494.05
RW - 2	05/05/10	3520.24	26.09	26.18	0.09	3494.14
RW - 2	05/13/10	3520.24	26.12	26.24	0.12	3494.10
RW - 2	05/14/10	3520.24	26.15	26.25	0.10	3494.08

TABLE 1

### **GROUNDWATER ELEVATION TABLE - 2010**

Well Number	Date Measured	Top of Casing Elevation	Depth to product	Depth to Water	PSH thickness	Corrected Groundwater Elevation
RW - 2	05/19/10	3520.24	26.14	26.25	0.11	3494.08
RW - 2	05/24/10	3520.24	26.14	26.26	0.12	3494.08
RW - 2	05/28/10	3520.24	26.16	26.82	0.66	3493.98
RW - 2	06/04/10	3520.24	26.18	26.20	0.02	3494.06
RW - 2	06/09/10	3520.24	26.36	26.72	0.36	3493.83
RW - 2	06/10/10	3520.24	26.30	26.51	0.21	3493.91
RW - 2	06/16/10	3520.24	26.48	26.60	0.12	3493.74
RW - 2	06/24/10	3520.24	26.51	26.75	0.24	3493.69
RW - 2	06/29/10	3520.24	26.70	26.85	0.15	3493.52
RW - 2	07/09/10	3520.24	21.41	21.44	0.03	3498.83
RW - 2	07/13/10	3520.24	26.29	26.34	0.05	3493.94
RW - 2	07/19/10	3520.24	26.17	26.25	0.08	3494.06
RW - 2	07/28/10	3520.24	26.08	26.19	0.11	3494.14
RW - 2	08/03/10	3520.24	26.21	26.26	0.05	3494.02
RW - 2	08/04/10	3520.24	26.03	26.18	0.15	3494.19
RW - 2	08/19/10	3520.24	26.02	26.22	0.20	3494.19
RW - 2	08/27/10	3520.24	26.05	26.25	0.20	3494.16
RW - 2	08/31/10	3520.24	26.08	26.29	0.21	3494.13
RW - 2	09/17/10	3520.24	26.06	26.23	0.17	3494.15
RW - 2	10/13/10	3520.24	26.18	26.46	0.28	3494.02
RW - 2	11/02/10	3520.24	26.65	26.76	0.11	3493.57
RW - 2	11/05/10	3520.24	26.13	26.42	0.29	3494.07
RW - 2	11/10/10	3520.24	26.17	27.14	0.97	3493.92
RW - 2	11/19/10	3520.24	26.13	27.06	0.93	3493.97
RW - 2	12/01/10	3520.24	26.04	26.19	0.15	3494.18
RW - 2	12/09/10	3520.24	26.04	26.20	0.16	3494.18

<sup>\*</sup> Complete Historical Tables are provided on the attached CD.

### **CONCENTRATIONS OF BTEX IN GROUNDWATER-2010**

# PLAINS MARKETING, L.P. TEXACO SKELLY "F" LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER 1R-0420

All concentrations are reported in mg/L

5*************************************	All concentrations are reported in mg/L						
CANDIE	CARENTE	EPA Method SW 846-8021B					
SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m - p XYLENES	o - XYLENE	
NMOCD Regi	ulatory Limit	0.010	0.75	0.75	Total XY		
MW - 1	02/01/10	Not Sample	d on Current S	Sample Schedule	0.0	<i>-</i>	
MW - 1	05/04/10			Sample Schedule			
MW - 1	08/03/10			Sample Schedule			
MW - 1	11/02/10	<0.001	< 0.001	< 0.001	<0.0	001	
			<b>V.</b> V.		in the second second		
MW - 2	02/01/10		d on Current S	Sample Schedule			
MW - 2	05/04/10			Sample Schedule			
MW - 2	08/03/10			Sample Schedule			
MW - 2	11/02/10	< 0.001	< 0.001	< 0.001	<0.0	001	
					Tomorine (Art)		
MW - 3	02/01/10	Not Sample	d on Current S	Sample Schedule		7.1172.09.011.09.2000.000.00.01.01	
MW - 3	05/04/10			Sample Schedule			
MW - 3	08/03/10	Not Sample	d on Current S	Sample Schedule			
MW - 3	11/02/10	< 0.001	< 0.001	< 0.001	<0.0	001	
						PARTY CHILATERS AND	
MW - 4	02/01/10	0.0362	< 0.001	< 0.001	<0.0	001	
MW - 4	05/04/10	0.0202	< 0.001	0.0026	0.00	056	
MW - 4	08/03/10	0.0218	< 0.001	0.0039	<0.0	001	
MW - 4	11/02/10	0.0150	< 0.001	< 0.001	0.00	)79	
MW - 5	02/01/10	Not Sample	d on Current S	Sample Schedule			
MW - 5	05/04/10	_		Sample Schedule			
MW - 5	08/03/10	<del>-</del>		Sample Schedule			
MW - 5	11/02/10	< 0.001	< 0.001	<0.001	<0.0	001	
properties	er zasta santa a se		e aluka es <sup>t</sup>	- #	######################################	AND AND ASSESSMENT OF THE PARTY.	
MW - 6	02/01/10			Sample Schedule			
MW - 6	05/04/10			Sample Schedule			
MW - 6	08/03/10	<del></del>		Sample Schedule			
MW - 6	11/02/10	<0.001	<0.001	<0.001	<0.0	001	
		- 1 A SAME			destroys a final lan		
MW - 7	02/01/10		pled Due to l				
MW - 7	05/04/10		pled Due to I				
MW - 7	08/03/10		pled Due to I				
MW - 7	11/02/10	0.0345	<0.001	<0.001	<0.0	001	
	green		100	Berger of the Control		4.0	

### **CONCENTRATIONS OF BTEX IN GROUNDWATER-2010**

# PLAINS MARKETING, L.P. TEXACO SKELLY "F" LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER 1R-0420

All concentrations are reported in mg/L

		21B							
SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m - p XYLENES	o - XYLENE			
NMOCD Regi	ulatory Limit	0.010	0.75	Total XYLENES 0.62					
MW - 8	02/01/10	Not san	npled Due to I	PSH in Well					
MW - 8	05/04/10	Not san	npled Due to I	PSH in Well					
MW - 8	08/03/10	Not san	npled Due to I	PSH in Well					
MW - 8	11/02/10	0.0065	< 0.001	0.0082	0.00	)83			
					2002cm				
MW - 9	02/01/10	< 0.001	< 0.001	< 0.001	<0.0	001			
MW - 9	05/04/10	< 0.001	< 0.001	< 0.001	<0.0	001			
MW - 9	08/03/10	< 0.001	< 0.001	< 0.001	<0.0	001			
MW - 9	11/02/10	< 0.001	< 0.001	< 0.001	<0.0	001			
Andrews Printer	energia e productiva de la compansión de					7 (A)			
RW - 1	02/01/10	Not san	npled Due to I	PSH in Well					
RW - 1	05/04/10	Not san	npled Due to I	PSH in Well					
RW - 1	08/03/10	Not san	npled Due to I	PSH in Well					
RW - 1	11/02/10	Not san	npled Due to I	PSH in Well					
			200 militari 150 militari	And Andrews	and the second				
RW - 2	02/01/10	Not san	npled Due to I	PSH in Well					
RW - 2	05/04/10	Not san	npled Due to I	PSH in Well					
RW - 2	08/03/10	Not san	npled Due to I	PSH in Well					
RW - 2	11/02/10	Not san	npled Due to I	PSH in Well					
	The second secon								

<sup>\*</sup> Complete Historical Tables are provided on the attached CD.

# POLYCYCLIC AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

# PLAINS MARKETING, L.P. TEXACO SKELLY "F" LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER 1R-0420

All water concentrations are reported in mg/L

			_		-	_	_	_	_		-		_	-	_	_	_				1112		-,444		-		الالملو	-	_	_	-
	Dibenzofuran		<0.000184	<0.000183		<0.000183	<0.000183		00.000	<0.000183			0.00148	0.000677			<0.000183	<0.000184		201000	<0.000183	-0.000104	A. 100 A. 100 A.	0.00206	0.00119			0.00519	0.00117		
	2-Methylnaphthalene		<0.000184	<0.000183	70	<0.000183	<0.000183	100 miles		<0.000183			<0.000184	<0.000183			<0.000183	<0.000184		201000	<0.000183	*0.00010*		0 000888	0.00189			0.0228	0.00847		
	i-Methylnaphthalene	J\gm £0.0		<0.000183	A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		<0.000183			<0.000183	-		0.00227			を できる かった	_	<0.000184	200000000000000000000000000000000000000		70,000183		を表える	0.0047	0.00375		19 19 7 Th	0.0289	0.0104		775.55
	Naphthalene		<0.000184				<0.000183	20 - 07.2 2.2 2.2 2.0 0 0 0 0 0 0 0 0 0 0 0 0 0		<0.000183			<0.000184	<0.000183				<0.000184		10000				0.00103	0.00121			0.00758	0.00327		3
	Pyrene		<0.000184				<0.000183	G 10 ( A 10 . 2) 11 12 12 12 12 12 12 12 12 12 12 12 12		<0.000183	_		<0.000184	<0.000183				<0.000184	THE COURT THE	00000		_		<0.000185	<0.000184			<0.000922	<0.000186		
	Phenanthrene		<0.000184		語ので大		<0.000183	700		<0.000183	-		0.000716	<0.000183				<0.000184	が一般を	1000			かがかんだっと	0.00109	1		See All Section	0.00814	+	_	10
	anatyq(bɔ-ɛ̃-t͡z,t]onabnl	J\gm \$000.0	<0.000184				<0.000183	N NORTH CONTRACT		<0.000183	-		14					<0.000184	50 March 200 Mar	201000				<0.000185	_		ことのを養み	<0.000922	<0.000186		
	ənəroufi		<0.000184				<0.000183	The state of the s		<0.000183	_		0.000573	<0.000183				<0.000184		100000				0.00117	1			0.00615	७		
, 3510	Гічогапі і пепе		<0.000184			_	<0.000183	* 1917 (412) 273		<0.000183	-		<0.000184	<0.000183				<0.000184	5490	001000				<0.000185	<0.000184			<0.000922	-	_	
EPA SW846-8270C, 3510	Dibenz[a,h]anthracene	Л\зт £000.0	<0.000184			_	<0.000183			<0.000183	-		<0.000184	<0.000183				<0.000184		1000			2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-		,	1	00922	<0.000186		
EPA SW	Сутучене	J\gm 2000.0	<0.000184				<0.000183	100 to 10		<0.000183			<0.000184	<0.000183				<0.000184		000100								<0.000922			
	Benzo[k]finoranthene	J\gm 2000.0	<0.000184		le s		183	Event.		<0.000183			<0.000184	<0.000183	Event.			<0.000184	Secut.	000000				0185		Event.		<0.000922	<0.000186		
	Benzo[g,h,i]perylene	<del></del>		Monitoring		-		ly Monitoring		<0.000183		10 mg	<0.000184				_	<0.000184	I I I I I I I I I I I I I I I I I I I	000000		ᆔᇧ	の意思と	<0.000185		Monitoring		<0.000922	<0.000186	Monitoring	
	Benzo[b] fluoranthene	J\gm £000.0	<0.000184	취근		8	<0.000183	of Quarterly	W (	2 4	1은		4	<0.000183	Not Sampled as part of Quarterly Monitoring		2	000184 < 0.000184 < 0.000184   < 0.000184	T Cualicity	0 000102	গাৰ	of Onarterly	10000000000000000000000000000000000000	<0.000185	4	Not Sampled as part of Quarterly Monitoring		<0.000922	92	Not Sampled as part of Quarterly Monitoring	
	Вепго[я]ругепе	J\gm 7000.0	<0.000184			_	<0.000183	Not Sampled as part of Quarter	00000	<0.000183 <0.00018 <0.000184 <0.00018	oled as part of		<0.000184 < 0.000184 < 0.000184 < 0.00018	<0.000183	oled as part o			<0.000184	ned as part	000000	<0.000183 <0.00018	Not Sampled as part of Quarterly	「一日の一日の一日の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本	<0.000185		oled as part of		<0.000922		oled as part	
	Benzo[a]anthracene	J\ym 1000.0	<0.000184	<0.000183 Not Sam	Catalogic		<0.000183	Not Sam		<0.000183	Not Sam	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	<0.000184	<0.000183	Not Sam		<0.000183	<0.000184	INDI OUT	20,000,00		Not Sam		<0.000185	<0.000184	Not Sam	THE WAY THE	<0.000922	<0.000186	Not Sam	
	эпээвтийпА		<0.000184	<0.000183		<0.000183	<0.000183		201000	<0.000183		14 / 14 / W				では日本で	<0.000183 <0.000183 <0.000183	<0.000184		000000		10.000.0		<0.000185			10 mg	<0.000922			
	Acenaphthylene		<0.000184 <0.000184	<0.000183		<0.000183	<0.000183	Section of the sectio	2010000	<0.000183			<0.000184	<0.000183			<0.000183	<0.000184 <0.000184	100 m	000000	0.000102	-0.000101		<0.000185	<0.000184		1000年間	<0.000922	<0.000186		is.
	Acenaphthene	_	<0.000184				<0.000183	AND THE CONTRACTOR OF THE CONT		<0.000183		18.0	<0.000184					<0.000184		000000	0 000 187	-0.00010+		<0.000185	<0.000184			<0.000922	<0.000186		
	SAMPLE DATE	ntaminant M ng water ions 1- 103.A.	1+	11/02/10	1.5	$\vdash$	$\dashv$	11/02/10	25	11/03/08	╀╌	9/300	-	11/03/09	11/05/10		-	11/03/09	01/70/11	9	┿	+	100	+	┢	11/02/10		11/08/08	Н	11/02/10	
SAMPLE S.		faximum Contaminant cevels from NM VQCC Drinking water tandards Sections I-01.UU and 3-103.A.	MW-1			MW-2		* ### 1200 days	W.	MW-3							MW-5	+		27174	†	-	· · · · · · · · · · · · · · · · · · ·	~	_			MW-8	Н	-	

# POLYCYCLIC AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

# PLAINS MARKETING, L.P. TEXACO SKELLY "F"

LEA COUNTY, NEW MEXICO	NMOCD REFERENCE NUMBER 1R-0420	7/

	Dibenzofuran		<0.000185	<0.000185		11.	9600.0	0.00735		1000年	0.00424	0.00792	
	2-Methylnaphthalene	-	<0.000185	<0.000185		7.70	0.0584	0.0527		(B)	0.0188	0.0675	
	1-Methylnaphthalene	J\gm £0.0	<0.000185	<0.000185		1000年の大学	0.0382	0.0645			0.0156	0.0736	
	Naphthalene		<0.000185	<0.000185			0.0155	0.0150			0.0077	0.0242	
	Ругепе		<0.000185	<0.000185			<0.000926	<0.000185			<0.000917	<0.000183	
	Рћепапthrепе		<0.000185	<0.000185		での お を ぬる	0.0124	0.0119			0.00541	0.0114	
	ənəτγq(bɔ-εˌ٤,t]onəbnl	J\gm \$000.0	<0.000185	<0.000185		Service Services	<0.000926	<0.000185			<0.000917	<0.000183	
	Fluorene		<0.000185	<0.000185			0.0102	0.00785		是 震 震	0.00436	<0.000183	
, 3510	Fluoranthene		<0.000185	<0.000185			<0.000926	<0.000185			<0.000917	<0.000183	
EPA SW846-8270C, 3510	Dibenz a,h anthracene	J\gm £000.0	<0.000185	<0.000185		4 34 5	<0.000926 < 0.000926 < 0.000926 < 0.000926 < 0.000926	<0.000185			<0.000917	<0.000183	
EPA SW	Суцузеве	J\gm £000.0	<0.000185	<0.000185		10000000000000000000000000000000000000	<0.000926	<0.000185			<0.000917	<0.000183	
	Benzo[k]fluoranthene	J\gm £000.0	<0.000185		Event.		<0.000926	<0.000185	Event.		<0.000917	<0.000183	Event.
	Benzo[g,h,i]perylene		<0.000185	<0.000185 <0.000185	Monitoring Event	A 40 10 ME	<0.000926	<0.000185	Monitoring Even		<0.000917	<0.000183	Monitoring Event
	Benzo[b]fluoranthene	.1\gm 2000.0	<0.000185	<0.000185	of Quarterly		<0.000926	<0.000185	of Quarterly		<0.000917	<0.000183	of Quarterly
	Benzo[a]pyrene	J\zm 7000.0	<0.000185	<0.000185 <0.000185 <0.000185 <0.000185 <0.000185	Not Sampled as part of Quarterl		<0.000926	<0.000185 < 0.000185 < 0.000185	Not Sampled as part of Quarterl		<0.000917 < 0.000917   < 0.000917   < 0.000917   < 0.000917	<0.000183	Not Sampled as part of Quarterl
	Вепго[я]япthгасепе	J\3m 1000.0	<0.000185	<0.000185	Not Sam		<0.000926	<0.000185	Not Sam		<0.000917	<0.000183	Not Sam
	эпээвтийлА	_	<0.000185 <0.000185 <0.000185	<0.000185		A section of the sect	<0.000926	<0.000185 <0.000185			<0.000917	<0.000183	
	Асепарћећујене	· <b>-</b> -	<0.000185	<0.000185			<0.000926				<0.000917	< 0.000183	
	Асепарітепе		<0.000185	<0.000185		7.	<0.000926 <0.000926 <0.000926 <0.000926 <0.000926 <0.000926	<0.000185			<0.000917	<0.000183 <0.000183 <0.000183 <0.000183 <0.000183 <0.000183	
	SAMPLE DATE	ntaminant M ing water ions 1- 103.A.	11/08/08	11/03/09	11/02/10		11/08/08	11/03/09	11/02/10		11/08/08	11/03/09	11/02/10
	SAMPLE S LOCATION	Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1- 101.UU and 3-103.A.	6-WM			の では、 の では、	RW-1				RW-2		

Appendices

Appendix A
Release Notification and Corrective Action
(Form C-141)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-141 Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

### **Release Notification and Corrective Action**

						<b>OPER</b> A	TOR		x Initia	al Report		Final R	.eport		
Name of Co			Pipeline,			Contact: Camille Reynolds									
Address:				d, TX 79706		Telephone N									
Facility Nar	ne	Texaco	Skelly F		]	Facility Type: 4" Steel Pipeline									
Surface Ow	ner:	Millard D	eck Estat	e Mineral O	wner		······································		Lease N	lo.					
				LOCA		OF RE	LEASE								
Unit Letter G	Section 21	Township 20S	Range 37E	Feet from the	North/	South Line	Feet from the	East/V	Vest Line	County Lea					
		•	Latitud	e 32 degrees 33	' 48.02 <sup>°</sup>	<u>"</u> Longitud	e <u>103 degrees 15</u>	5' 48.0	8"			·			
NATURE OF RELEASE															
Type of Rele	ase:	Crude Oil				Volume of	Release: 30		Volume F	Recovered	0				
Source of Re	lease: 4	4" Steel Pipel	ine			Date and H 09/15/19	lour of Occurrenc	e		Hour of Dis-					
Was Immedia	ate Notice (		es 🛛 N	Jo □ Not Requ	ired	If YES, To Donna Wil									
By Whom?	Frank He	rnandez				Date and H	lour 02/02/01 0	2:30 PN	1						
Was a Water	course Read		Yes 🛭	No No		If YES, Vo	lume Impacting ti	he Wate	ercourse.						
If a Watercou	rce was Im	nacted Descr	ihe Fully *	•		]				·					
	If a Watercourse was Impacted, Describe Fully.*														
Describe Cau	se of Probl	em and Reme	dial Action	n Taken.* Interna	ıl corrosi	ion of 4" stee	l pipeline. Forty:	feet of t	he line was	replaced.					
Describe Area Affected and Cleanup Action Taken.* Forty feet of the line was replaced. The aerial extent of surface impact was approximately 30' x 100'.  NOTE: This information was obtained from historical EOTT files, Plains acquired EOTT/Link on April 1, 2004 and Plains assumes this information to be correct.															
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.															
					OIL CONSERVATION DIVISION										
Signature:															
Printed Name	e: Ca	amille Reynolo	is	-	1	Approved by									
Title:	Re	mediation Cod	ordinator			Approval Dat	e:	i	Expiration Date:						
E-mail Addre	ess: cji	reynolds@paal	lp.com		(	Conditions of Approval:				Attached					
Date: 3/21/20		ate If Nagace	Phone:	(505)441-0965	5										

Attach Additional Sheets If Necessary