RECR – 5

Enersource Refinery

Correspondence

2010 thru 2013

INTERA Incorporated
6000 Uptown Blvd, NE
Suite 100
Albuquerque, NM 87110
Telephone: (505) 246-1600
Fax: (505) 246-2600

May 16, 2008

Mr. Jim Griswold
Hydrologist
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Dear Mr. Griswold,

I am enclosing the revised Figures 6 and 9 along with the laboratory reports for the soil samples collected as part of the ***Phase I and II Remediation, Former Enersource Facility: Monument, Lea County, New Mexico*** report dated June 29, 2007.

If you have any questions, please contact me at (505) 246-1600.

Sincerely,
INTERA Incorporated

Joe Galemore
Senior Project Manager

Enclosures

JAG/jep

FILE: NMO-ENE-01-01

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, July 10, 2006

Joseph Tracy
Intera, Inc.
6000 Uptown Boulevard, NE Suite 100
Albuquerque, NM 87110

TEL: (505) 246-1600
FAX (505) 246-2600

RE: Enersource

Order No.: 0606337

Dear Joseph Tracy:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 6/29/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

AZ license # AZ0682
ORELAP Lab # NM100001

CASE NARRATIVE

"S" flags denote that the surrogate was not recoverable due to sample dilution or matrix interferences.

Hall Environmental Analysis Laboratory, Inc.

Date: *10-Jul-06*

CLIENT:	Intera, Inc.	**Client Sample ID:**	JR1
Lab Order:	0606337	**Collection Date:**	6/28/2006 11:55:00 AM
Project:	Enersource	**Date Received:**	6/29/2006
Lab ID:	0606337-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	25000	2000		mg/Kg	200	7/4/2006 11:12:33 PM
Motor Oil Range Organics (MRO)	23000	10000		mg/Kg	200	7/4/2006 11:12:33 PM
Surr: DNOP	0	61.7-135	S	%REC	200	7/4/2006 11:12:33 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	7/1/2006 8:26:05 PM
Surr: BFB	93.0	81.7-127		%REC	20	7/1/2006 8:26:05 PM
EPA METHOD 9056A: ANIONS						Analyst: **MAP**
Chloride	190	3.0		mg/Kg	10	7/6/2006 3:15:46 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *10-Jul-06*

CLIENT:	Intera, Inc.	**Client Sample ID:**	E1
Lab Order:	0606337	**Collection Date:**	6/28/2006 3:07:00 PM
Project:	Enersource	**Date Received:**	6/29/2006
Lab ID:	0606337-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	12000	2000		mg/Kg	200	7/4/2006 11:43:34 PM
Motor Oil Range Organics (MRO)	14000	10000		mg/Kg	200	7/4/2006 11:43:34 PM
Surr: DNOP	0	61.7-135	S	%REC	200	7/4/2006 11:43:34 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	7/1/2006 8:54:57 PM
Surr: BFB	93.8	81.7-127		%REC	20	7/1/2006 8:54:57 PM
EPA METHOD 9056A: ANIONS						Analyst: **MAP**
Chloride	82	3.0		mg/Kg	10	7/6/2006 3:33:10 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *10-Jul-06*

CLIENT:	Intera, Inc.	**Client Sample ID:**	E2
Lab Order:	0606337	**Collection Date:**	6/28/2006 3:15:00 PM
Project:	Enersource	**Date Received:**	6/29/2006
Lab ID:	0606337-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	5300	1000		mg/Kg	100	7/5/2006 11:18:33 AM
Motor Oil Range Organics (MRO)	5900	5000		mg/Kg	100	7/5/2006 11:18:33 AM
Surr: DNOP	0	61.7-135	S	%REC	100	7/5/2006 11:18:33 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	7/1/2006 9:23:46 PM
Surr: BFB	93.2	81.7-127		%REC	20	7/1/2006 9:23:46 PM
EPA METHOD 9056A: ANIONS						Analyst: **MAP**
Chloride	28	3.0		mg/Kg	10	7/6/2006 3:50:35 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: Intera, Inc.
Project: Enersource
Work Order: 0606337

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E300									
Sample ID: MB-10739		*MBLK*			Batch ID:	**10739**	Analysis Date:		7/4/2006 8:00:57 AM
Chloride	ND	mg/Kg	0.30						
Sample ID: LCS-10739		*LCS*			Batch ID:	**10739**	Analysis Date:		7/4/2006 8:53:09 AM
Chloride	14.51	mg/Kg	0.30	96.7	90	110			
Method: SW8015									
Sample ID: MB-10742		*MBLK*			Batch ID:	**10742**	Analysis Date:		7/4/2006 6:49:41 PM
Diesel Range Organics (DRO)	ND	mg/Kg	10						
Motor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: LCS-10742		*LCS*			Batch ID:	**10742**	Analysis Date:		7/4/2006 7:22:43 PM
Diesel Range Organics (DRO)	48.61	mg/Kg	10	97.2	64.6	116			
Sample ID: LCSD-10742		*LCSD*			Batch ID:	**10742**	Analysis Date:		7/4/2006 7:55:45 PM
Diesel Range Organics (DRO)	52.28	mg/Kg	10	105	64.6	116	7.28	17.4	
Method: SW8015									
Sample ID: MB-10718		*MBLK*			Batch ID:	**10718**	Analysis Date:		7/1/2006 3:36:03 PM
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: LCS-10718		*LCS*			Batch ID:	**10718**	Analysis Date:		7/1/2006 4:05:14 PM
Gasoline Range Organics (GRO)	19.20	mg/Kg	5.0	76.8	73.4	115			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spil 5~/ 6very outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name INT | Date and Time Received: 6/29/2006

Work Order Number 0606337 | Received by GLS

Checklist completed by B Schlegel 6-29-06
Signature | Date

Matrix | Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? **26°** *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Intera Inc
Address: 6000 Uptown Blvd NE
Suite 100
Albuquerque NM 87110
Phone #: 246-1600
Fax #: 246-2600

Project Name: Enersource
Project #: NMO-ENE-01-01
Project Manager: Joe Tracy
Sampler: Konrad Clark
Sample Temperature: 26°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	HEAL No. 06060337
6/28/06	1155	Soil	JR 1	1-Glass 8oz			1
6/28/06	1507	Soil	E1	1-Glass 4oz			2
6/28/06	1515	Soil	E2	1-Glass 4oz			3

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
6/29/06	1007		
			6-29-06 1007

Remarks: Direct Bill NMOCD

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel) MRO DRO GRO	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Chloride				Air Bubbles or Headspace (Y or N)
		X										X				
		X										X				
		X										X				

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, September 25, 2006

Joseph Tracy
Intera, Inc.
6000 Uptown Boulevard, NE Suite 100
Albuquerque, NM 87110

TEL: (505) 246-1600
FAX (505) 246-2600

RE: Enersource

Order No.: 0609172

Dear Joseph Tracy:

Hall Environmental Analysis Laboratory, Inc. received 8 sample(s) on 9/15/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

AZ license # AZ0682
ORELAP Lab # NM100001

"S" flags denote that the surrogate was not recoverable due to sample dilution or matrix interferences.

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Sep-06*

CLIENT:	Intera, Inc.	**Client Sample ID:**	ES-1
Lab Order:	0609172	**Collection Date:**	9/14/2006 3:52:00 PM
Project:	Enersource	**Date Received:**	9/15/2006
Lab ID:	0609172-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	9400	1000		mg/Kg	100	9/21/2006 5:18:07 PM
Motor Oil Range Organics (MRO)	6000	5000		mg/Kg	100	9/21/2006 5:18:07 PM
Surr: DNOP	0	61.7-135	S	%REC	100	9/21/2006 5:18:07 PM
EPA METHOD 9056A: ANIONS						Analyst: TES
Chloride	25	1.5		mg/Kg	5	9/21/2006 5:09:47 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Sep-06*

CLIENT:	Intera, Inc.	**Client Sample ID:**	ES-2
Lab Order:	0609172	**Collection Date:**	9/14/2006 4:06:00 PM
Project:	Enersource	**Date Received:**	9/15/2006
Lab ID:	0609172-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/21/2006 5:53:15 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/21/2006 5:53:15 PM
Surr: DNOP	85.6	61.7-135		%REC	1	9/21/2006 5:53:15 PM
EPA METHOD 9056A: ANIONS						Analyst: TES
Chloride	570	3.0		mg/Kg	10	9/22/2006 11:39:42 AM

Qualifiers:				
	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Sep-06*

CLIENT:	Intera, Inc.	**Client Sample ID:**	ES-3
Lab Order:	0609172	**Collection Date:**	9/14/2006 4:22:00 PM
Project:	Enersource	**Date Received:**	9/15/2006
Lab ID:	0609172-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	3600	1000		mg/Kg	100	9/21/2006 6:28:27 PM
Motor Oil Range Organics (MRO)	ND	5000		mg/Kg	100	9/21/2006 6:28:27 PM
Surr: DNOP	0	61.7-135	S	%REC	100	9/21/2006 6:28:27 PM
EPA METHOD 9056A: ANIONS						Analyst: TES
Chloride	560	1.5		mg/Kg	5	9/21/2006 5:44:35 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Value above quantitation range
J	Analyte detected below quantitation limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Sep-06*

CLIENT:	Intera, Inc.	**Client Sample ID:**	ES-4
Lab Order:	0609172	**Collection Date:**	9/14/2006 4:37:00 PM
Project:	Enersource	**Date Received:**	9/15/2006
Lab ID:	0609172-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/21/2006 7:03:35 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/21/2006 7:03:35 PM
Surr: DNOP	85.3	61.7-135		%REC	1	9/21/2006 7:03:35 PM
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Chloride	140	1.5		mg/Kg	5	9/22/2006 11:57:06 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Value above quantitation range
J	Analyte detected below quantitation limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Sep-06*

CLIENT:	Intera, Inc.	**Client Sample ID:**	ES-5
Lab Order:	0609172	**Collection Date:**	9/14/2006 4:55:00 PM
Project:	Enersource	**Date Received:**	9/15/2006
Lab ID:	0609172-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/21/2006 7:38:42 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/21/2006 7:38:42 PM
Surr: DNOP	85.1	61.7-135		%REC	1	9/21/2006 7:38:42 PM
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Chloride	140	3.0		mg/Kg	10	9/21/2006 6:54:13 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Sep-06*

CLIENT:	Intera, Inc.	**Client Sample ID:**	ES-6
Lab Order:	0609172	**Collection Date:**	9/14/2006 5:15:00 PM
Project:	Enersource	**Date Received:**	9/15/2006
Lab ID:	0609172-06	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	2900	500		mg/Kg	50	9/21/2006 8:13:47 PM
Motor Oil Range Organics (MRO)	ND	2500		mg/Kg	50	9/21/2006 8:13:47 PM
Surr: DNOP	0	61.7-135	S	%REC	50	9/21/2006 8:13:47 PM
EPA METHOD 9056A: ANIONS						Analyst: TES
Chloride	97	1.5		mg/Kg	5	9/21/2006 7:11:38 PM

Qualifiers:				
	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Sep-06*

CLIENT:	Intera, Inc.	**Client Sample ID:**	ES-7
Lab Order:	0609172	**Collection Date:**	9/14/2006 5:29:00 PM
Project:	Enersource	**Date Received:**	9/15/2006
Lab ID:	0609172-07	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/21/2006 8:48:54 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/21/2006 8:48:54 PM
Surr: DNOP	85.0	61.7-135		%REC	1	9/21/2006 8:48:54 PM
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Chloride	4.7	3.0		mg/Kg	10	9/21/2006 7:29:02 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Value above quantitation range
J	Analyte detected below quantitation limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Sep-06*

CLIENT:	Intera, Inc.	**Client Sample ID:**	ES-8
Lab Order:	0609172	**Collection Date:**	9/14/2006 5:40:00 PM
Project:	Enersource	**Date Received:**	9/15/2006
Lab ID:	0609172-08	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/21/2006 9:24:00 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/21/2006 9:24:00 PM
Surr: DNOP	85.6	61.7-135		%REC	1	9/21/2006 9:24:00 PM
EPA METHOD 9056A: ANIONS						Analyst: TES
Chloride	220	1.5		mg/Kg	5	9/22/2006 12:14:30 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: Intera, Inc.
Project: Enersource

Work Order: 0609172

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW9056A									
Sample ID: MB-11322		*MBLK*			Batch ID: **11322**		Analysis Date:		9/21/2006 4:17:35 PM
Chloride	ND	mg/Kg	0.30						
Sample ID: LCS-11322		*LCS*			Batch ID: **11322**		Analysis Date:		9/21/2006 4:34:59 PM
Chloride	14.50	mg/Kg	0.30	96.7	90	110			
Method: SW8015									
Sample ID: MB-11280		*MBLK*			Batch ID: **11280**		Analysis Date:		9/20/2006 2:15:27 AM
Diesel Range Organics (DRO)	ND	mg/Kg	10						
Motor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: LCS-11280		*LCS*			Batch ID: **11280**		Analysis Date:		9/20/2006 2:50:18 AM
Diesel Range Organics (DRO)	39.57	mg/Kg	10	79.1	64.6	116			
Sample ID: LCSD-11280		*LCSD*			Batch ID: **11280**		Analysis Date:		9/20/2006 3:25:05 AM
Diesel Range Organics (DRO)	38.52	mg/Kg	10	77.0	64.6	116	2.70	17.4	

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name INT | Date and Time Received: 9/15/2006

Work Order Number 0609172 | Received by AT

Checklist completed by _____ (Signature) 9-15-06 (Date)

Matrix | Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☑	No ☐	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 4° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Intera Inc.
Address: 6000 Uptown NE Suite 100
Albuquerque NM 87110
Phone #: (505) 246-1600
Fax #: (505) 246-2600

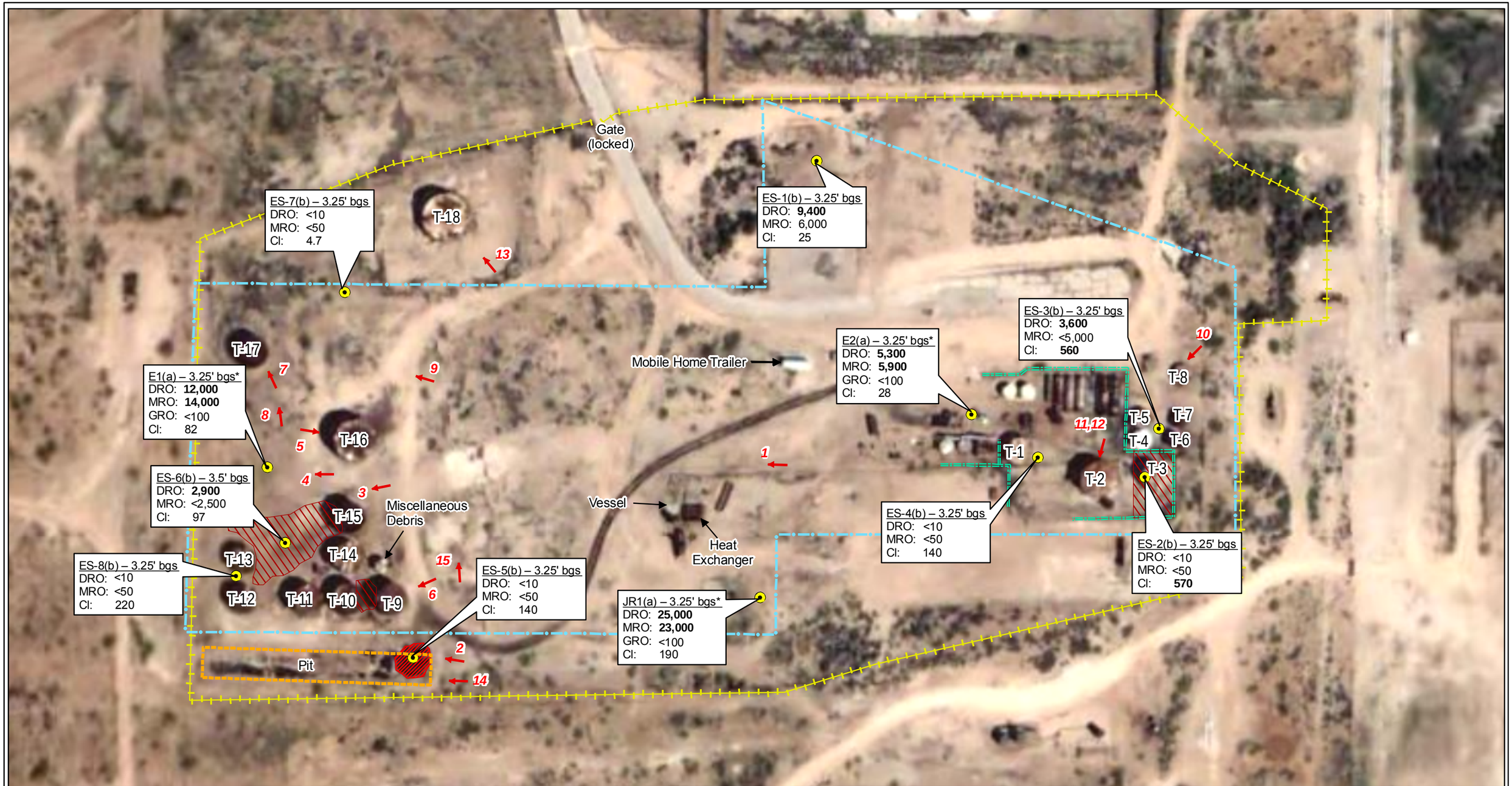
Project Name: Enersource
Project #: NMO-ENE-01-01
Project Manager: Joe Tracy
Sampler: Konrad Clark
Sample Temperature: 4

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0609172	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	9056A Chloride	8015 TPH DRO MRO			Air Bubbles or Headspace (Y or N)
9/14/06	1552	Soil	ES-1	1-40z Glass				1													X	X			
9/14/06	1606	Soil	ES-2	↓				2													X	X			
9/14/06	1622	Soil	ES-3					3													X	X			
9/14/06	1637	Soil	ES-4					4													X	X			
9/14/06	1655	Soil	ES-5					5													X	X			
9/14/06	1715	Soil	ES-6					6													X	X			
9/14/06	1729	Soil	ES-7					7													X	X			
9/14/06	1740	Soil	ES-8					8													X	X			
				↓																					

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
9/15/06	1047		
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
			9/15/06 1047

Remarks: Fax KC invoice OCD/AT 9/19/06



Source(s): 2005 aerial photo – MapTech;
Property boundary – John West Surveying Co., Hobbs, NM.

N
S
0 50 100 200 Feet

Legend

- Sample Location
- Property Boundary
- Oil Sludge
- Oil Spill
- Barbed Wire Fence
- Cinder Block Fence
- T-1 Tank Location and Reference #
- 18 Photo ID and Direction

Notes: Results are in mg/Kg
Bold indicates concentrations above NMOCD Action Levels
DRO = Diesel Range Organic
MRO = Motor Oil Range Organic
Cl = Chloride
ND = Not Detected above practical quantification limit

*Assumed depth based on depths of previous samples
(a) = Sample collected June 28, 2006
(b) = Sample collected September 14, 2006

INTERA

Figure 6
Phase I Photograph Locations and Soil Sample Analyses Results

Enersource Site – Monument, NM

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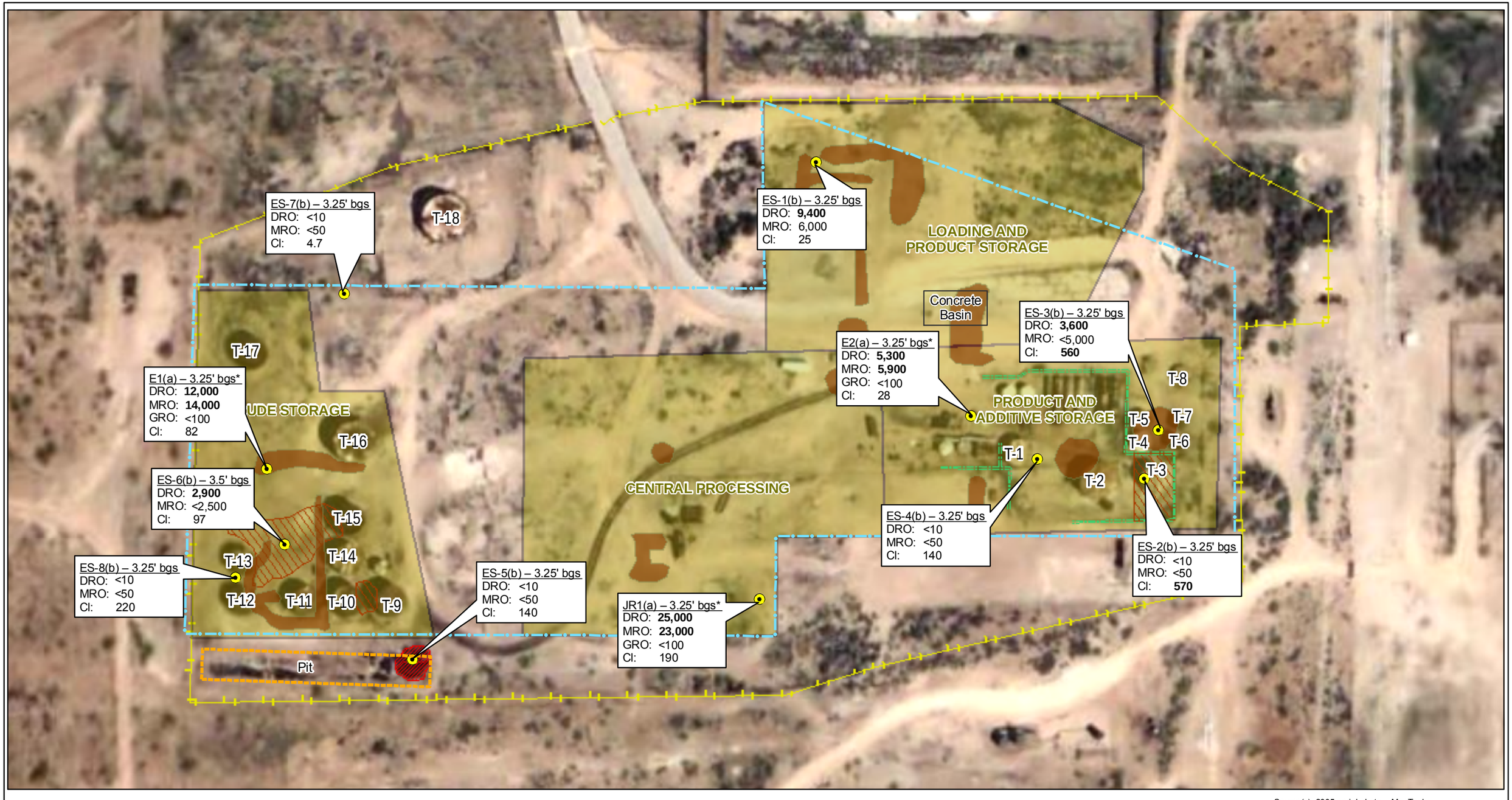

N
S
0 50 100 200 Feet

Legend

- Sample Location
- Property Boundary
- Barbed Wire Fence
- Cinder Block Fence
- Oil Sludge
- Oil Spill
- Grossly Impacted Soils Observed
- Investigation and Process Area
- T-1 Tank Location and Reference #

Notes: Results are in mg/Kg
Bold indicates concentrations above NMOCD Action Levels
DRO = Diesel Range Organic
MRO = Motor Oil Range Organic
Cl = Chloride
ND = Not Detected above practical quantification limit

*Assumed depth based on depths of previous samples
(a) = Sample collected June 28, 2006
(b) = Sample collected September 14, 2006

Source(s): 2005 aerial photo – MapTech;
Property boundary – John West Surveying Co., Hobbs, NM.

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Figure 9
Proposed Investigation Areas

Enersource Site – Monument, NM

INTERA Incorporated
6000 Uptown Blvd, NE
Suite 220
Albuquerque, NM 87110
Telephone: (505) 246-1600
Fax: (505) 246-2600

November 24, 2010

Mr. Jim Griswold
Hydrologist
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Work Plan and Cost Estimate for Groundwater Monitoring; Former Enersource Facility, Monument, New Mexico

Dear Mr. Griswold:

INTERA has prepared the enclosed scope of work and cost estimate for the above-referenced project. We look forward to the opportunity to discuss this scope of work with you. Please do not hesitate to contact me at (505) 246-1600 if you have any questions or require further information.

Sincerely,
INTERA Incorporated

Joe Galemore
Senior Project Manager

Eileen Romesser
Staff Hydrologist

WORK PLAN and COST ESTIMATE for GROUNDWATER MONITORING

Former Enersource Facility, Monument, New Mexico

Submitted to:

State of New Mexico Energy, Minerals
& Natural Resources Department
New Mexico Oil Conservation Division

Submitted by:

6000 Uptown Boulevard NE, Suite 220
Albuquerque, New Mexico 87110

November 24, 2010

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FIGURES

APPENDICES

1.0 INTRODUCTION

This work plan, which includes a scope of work (SOW) and cost estimate, is being submitted to conduct a groundwater quality sampling round at the former Enersource facility (Site) in Monument, Lea County, New Mexico. A project location map is provided in Figure 1. This work plan was prepared in response to a verbal request from Mr. Jim Griswold of the New Mexico Oil Conservation Division (NMOCD) to Mr. Joe A. Galemore of INTERA Inc. (INTERA) in November 2010. The cost estimate provided in Appendix A is based on State of New Mexico, General Services Department, Pricing Agreement # 80-805-00-03377 dated July 14, 2008.

The purpose of the project is to collect fluid levels and groundwater samples from six Site monitoring wells which were installed during investigation activities completed at the Site in June 2009.

The following subsection describes the Site and summarizes previous project activities. Section 2 of the work plan provides the proposed scope of work for the groundwater quality sampling round. Sections 3, 4, and 5 provide a project schedule, cost estimate, and qualifications of personnel, respectively. Cost estimate summaries and details are provided in Appendix A.

1.1. Site Description and Project Background

The Site covers 9.56 acres and is located in the northwest quarter of Section 1, Township 20 South, Range 36 East, Lea County, New Mexico (Figure 1). The Site is at an elevation of approximately 3,580 feet above mean sea level. The surface in the vicinity slopes down from northwest to southeast at a gradient of approximately 0.003 feet/foot (16 feet/mile). Monument Draw, a northwest to southeast flowing intermittent stream, is located about 2-1/2 miles south of the Site.

The estimated property boundary and the fenced area believed to have been used by Enersouce operations are illustrated on Figure 2. Land in the area is used for oil and gas exploration/production and cattle ranching. The Versado Gas Processing Plant (remediation permit # 1R-281) is located immediately adjacent to the northern property boundary. El Paso Natural Gas operates a facility within 500 feet of the eastern property boundary. Numerous oil/gas wells, pump jacks, and storage tanks are in the vicinity. Remediation of light non-aqueous phase liquids (LNAPL) is ongoing at the Versado Plant and depth to water ranges from 25 to 35 feet below ground surface (bgs) (Mr. Cal Wrangham of Targa, the current operator of the Versado Plant, personal communication, 2006)

A search of the State Engineer WATERS database revealed seven water wells within one-mile of the Site and two within Section 1. The closest well is a domestic supply well located

approximately 2,000 feet north of the Site; no information concerning depth to water was provided in the WATERS database. The next closest well is also a domestic supply well located about 3,000 feet east of the Site. The WATERS database lists the depth to water in this well as 40 feet bgs.

Based on historical aerial photographs taken in 1949, 1966, and 1978 it appears that significant development at the Site occurred after 1949. The aerial photograph taken in 1949 reveals one large tank that straddles the Site boundary, but, with the exception of some roads, the remainder of the Site is undeveloped. The 1966 and 1978 photographs show numerous (> 25) aboveground storage tanks (ASTs) located within or slightly outside the property boundary. The tanks are arranged into an eastern and a western cluster. The tank sizes within the western cluster are, in general, larger than the tanks in the eastern cluster. The two clusters of tanks are separated by a central area that contains buildings and, based on the shape of the shadows, tall narrow structures. Mr. Larry Parker, a long time resident of Lea County and former employee of Controlled Recovery Incorportaed, stated that the Site was used as a jet fuel refinery. Therefore, these tall, narrow structures formerly located in the central part of the Site may be cracking or distillation towers. Given the larger tank sizes, the western part of the property was probably used for crude storage; and the eastern cluster was used for product storage. A tractor trailer truck can be seen in the 1978 aerial photograph just north of the central processing area; this area may have been used for product loading.

It is unknown how long refinery operations occurred at the Site. Based on information obtained from the Lea County Tax Assessor, Enersource became the property owner in 1985. Our understanding is that Enersource used the facility to reclaim crude oil until sometime prior to 2006 when INTERA was contracted by OCD. Mr. Parker stated that the structures formerly located in the central part of the Site were dismantled and sold for scrap. The structures and materials that were not sold were buried in the west-central portion of the Site. It is unknown when this occurred. As discussed below, this waste has been removed from the Site.

INTERA was contracted in 2006 to test the existing ASTs and fluids/sludge for naturally occurring radioactive materials (NORM) and subsequently remove these materials from the Site. The ASTs and some underground piping were removed from the Site and disposed of at an off-Site facility in the summer of 2006. During the removal action, soil samples were collected at several locations and analyzed for the presence of total petroleum hydrocarbons (TPH), diesel range and motor oil range organics (DRO and MRO), and chlorides. Concentrations for TPH-DRO ranged from 2,900 to 9,400 mg/Kg, only one concentration was detected for TPH-MRO (6,000 mg/Kg), and concentrations of chloride ranged from 4.7 to 570 mg/Kg.

In April 2007, a geophysical survey was performed with the purpose of identifying buried, metal objects at the Site. The survey revealed the presence of several thousand feet of underground piping and large metal objects scattered throughout the Site. From May to June, 2007, INTERA and its subcontractor removed these subsurface materials and disposed of them at an off-Site facility. Trenching performed during the piping removal and soil samples collected during previous removal actions revealed contaminated soils in several areas.

In June 2009, INTERA completed Remedial Investigation and Removal Action (RI/RA) activities. Results of the RI/RA indicated that a release, or releases, of hydrocarbons at the former Famariss Energy Refinery and/or Enersource facility have impacted soil and groundwater at the Site. The presence of TPH gasoline range organics (GRO) and 1,2-dichloroethane (EDC) coupled with the high benzene to sum of benzene, toluene, ethylbenze, and total xylenes (BTEX) concentration ratios indicate that a portion of the release was refined product or gas condensate. The high TPH, DRO, and MRO concentrations suggest that a release of crude oil also occurred at the Site.

Shallow soils (i.e., surface to 6 feet bgs) consist of sand, clayey sand, and caliche. An area greater than 2 acres contains TPH in soils at concentrations above action levels. Benzene, BTEX, and chlorides at concentrations above action levels are also present in shallow soils but within smaller areas. The most impacted areas containing benzene above action levels are present in the pit, central processing, product loading, and eastern AST areas.

Deep soils (i.e., > 6 feet bgs) consist of caliche, clayey sand, and sandy clay. The water table exists in these units at a depth of about 35 feet bgs. These soils are impacted with TPH, benzene, BTEX, and chlorides over a large area. This area could not be defined because the Direct Push Technology (DPT) borings could not be advanced past a very hard caliche layer that exists at an average depth of 7.5 feet bgs.

Excavation of the pit located in the southwest corner of the Site to a depth of 10 feet bgs resulted in the removal of approximately 4,000 cubic yards of contaminated soil. The excavated soil was disposed of in a nearby landfill because high chloride concentrations precluded disposal in a landfarm. Confirmation soil sampling indicated that soil containing TPH (and possibly benzene, BTEX, and chloride) above action levels remain below and along the side walls of the excavation.

The estimated groundwater flow direction on June 25, 2009 was towards the southeast and the hydraulic gradient is estimated to be 0.002 foot/foot.

On June 25, 2009, LNAPL was present on the water table in MW-03 at a thickness of 1.42 feet. It is noteworthy that this is the most downgradient well installed at the Site suggesting that LNAPL may be present at off-site locations. Dissolved-phase benzene was present in groundwater at concentrations that were one to two orders of magnitude above NMWQCC standards in samples collected from MW-02, MW-03, MW-05, and MW-06.

2.0 SCOPE OF WORK

INTERA has divided the project SOW into the following three (3) tasks:

- Task 1 – Work Plan Preparation
- Task 2 – Monitoring Well Fluid Levels and Groundwater Sampling
- Task 3 – Reporting

2.1. Task 1 — Work Plan Preparation

Task 1 includes preparing this work plan. The deliverable for this task is this document. No additional work will be performed until this work plan is approved by your agency.

2.2. Task 2 — Monitoring Well Fluid Levels and Groundwater Sampling

These tasks will consist of the following activities:

- Coordinate site access, contacting OCD, updating HASP, and mobilization (secure equipment, vehicle, etc.)
- Travel to Monument, New Mexico
- Review site specific health and safety plan and conduct daily safety briefings
- Gauge depth-to-water and depth-to-product (as applicable) using a properly decontaminated interface probe at the following 6 locations:
  - Monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6
- Collect groundwater samples from the following monitoring wells
  - Monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6

Consistent with the last groundwater monitoring event, which was performed on June 26 and 29, 2010, INTERA will collect groundwater samples from monitoring wells: MW-1, MW-2, MW-3 (assuming no LNAPL is present), MW-4, MW-5, and MW-6 (Figure 2).

All of the 4-inch diameter monitoring wells will be purged using either an electric sampling pump or single-use disposable bailers prior to collecting samples. A minimum of three saturated well casing volumes will be purged from each well before a sample is collected unless all water is purged from the well. In which case, the well will be sampled immediately after sufficient volume of water has recharged into the well to fill sample containers. During purging activities, groundwater quality parameters (conductivity, temperature, and pH) shall be monitored while

purging. The groundwater sample will be collected directly from the disposable bailer using an attachable volatile organic compound (VOC) collection tip and placed into 40-milliliter (ml) vials that contain hydrochloric acid as a preservative. If an electrical pump is used to collect the groundwater samples, the sample will be collected from dedicated polyethylene tubing prior to the water quality flow-through cell. After collection, all samples will be labeled and immediately packed in an ice-chilled cooler for transport to the laboratory. Recovered fluids will be discharged to the ground adjacent to the originating well.

All groundwater monitoring and sampling activities will be conducted in accordance with Section 1.0 of the Guidelines for Corrective Action (NMED, 2000) and the INTERA Standard Operating Procedure (SOP) for groundwater monitoring (INTERA, 2004).

All samples will be submitted to Hall Environmental Analysis Laboratory (HEAL) for analysis of VOCs by EPA method 8260B, for chlorides by EPA method 300.0, and for total dissolved solids (TDS) by EPA method SM 2540C. A trip blank will be analyzed for VOCs in order to assess the potential for cross contamination. Proper chain-of-custody procedures will be adhered to during sample collection, transport, and delivery to HEAL.

For all field work conducted, INTERA field personnel will use permanently bound field logbooks to record and document field activities. The logbook will list the contract name and number, the project number, the Site name, the client, and the project manager. At a minimum, the following will be recorded in the field logbook:

- Names and affiliations of all on-Site personnel or visitors,
- Weather conditions during the field activity,
- Summary of daily activities and significant events,
- Notes of conversations with coordinating officials,
- Discussions of problems encountered and their resolutions, and
- Discussions of any deviations from the Work Plan.

2.3. Task 3 — Reporting

Upon the culmination of Task 2, INTERA will complete a report documenting results of the groundwater sampling activities. The report will include at a minimum:

- A Site map
- A Site map showing monitoring well locations
- Results of laboratory analytical data gathered (groundwater)

- A map showing the locations and concentrations of Benzene, BTEX, and Chloride in groundwater
- Photographic documentation of field activities

3.0 SCHEDULE

INTERA will begin scheduling and project coordination as soon as possible after the NMOCD has issued a purchase document for the investigation. The work is estimated to be completed in 25 working days.

4.0 COST ESTIMATE

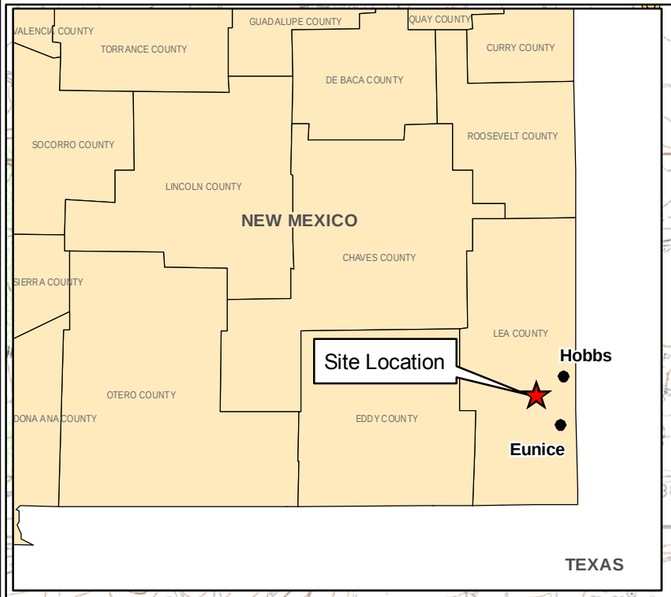
The cost estimate to provide the services described above is summarized in Appendix A. INTERA's services will be provided on a time and material price basis. INTERA will not exceed these costs without first requesting and then obtaining approval for an amendment to this budget.

5.0 REFERENCES

INTERA, 2007. *Phase I and II Remediation, Former Enersource Facility, Monument, Lea County, New Mexico*. June 29.

INTERA, 2009. *Remedial Investigation and Removal Action Report, Former Enersource Facility, Monument, Lea County, New Mexico*. December 4.

Figures



Versado Gas Processing Plant

El Paso Natural Gas Facility

Monument

Monument

28 Well

N

S

0 1,000 2,000 4,000 Feet

USGS 7.5 Minute Topographic Map:
Monument North Quadrangle,
1985, Contour Interval 10 Feet;
Monument South Quadrangle,
1985, Contour Interval 5 Feet;
Hobbs West and Hobbs SW Quadrangles,
1969/revised 1979, Contour Interval 5 Feet
Site Location: NW¼ Sec. 1; T20S; R36E

Legend

- Property Boundary

WATERS Database Well Locations

- DOM - Domestic
- PRO - Prospecting/Dev. of Natural Resources
- EXP - Exploration
- MUL - Multiple Domestic
- POL - Pollution Control
- STK - Livestock Watering
- IRR - Irrigation
- SAN - Sanitary

Source(s):
Wells – WATERS database, 2008;
Topos – MapTech/USGS.

Figure 1
Project Location Map
with Vicinity Wells

Enersource Site – Monument, NM

S:\Projects\OCD - Enersource Facility\graphics\Monument NM\GIS\September2009\figure1.mxd

Source(s): 1978 aerial photo – NMDOT;
Property boundary/monitoring wells – John West Surveying Co., Hobbs, NM.

N
S
0 50 100 200
Feet

Legend

Monitoring Well Location

Property Boundary

Barbed Wire Fence

Cinder Block Fence

INTERA

Figure 2
Monitoring Well Locations

Enersource Site – Monument, NM

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Appendix A

Project Cost Estimate

Cost Estimate for Groundwater Sampling
Former Enersource Facility
New Mexico Oil Conservation Division
November 24, 2010

Task 1. Work Plan Preparation		
Subtotal Professional Labor	$	1,030.00
SUBTOTAL: TASK 1	**$**	**1,030.00**
NMGRTX (7.0%)	**$**	**72.10**
TOTAL: Task 1	**$**	**1,102.10**
Task 2. Monitoring Well Fluid Levels and Groundwater Sampling		
Subtotal Professional Labor	$	2,920.00
Subtotal Expenses	$	1,418.50
Subtotal Subcontract Costs	$	1,056.00
SUBTOTAL: TASK 2	**$**	**5,394.50**
NMGRTX (7.0%)	**$**	**377.62**
TOTAL: Task 2	**$**	**5,772.12**
Task 3. Report		
Subtotal Professional Labor	$	2,680.00
SUBTOTAL: TASK 3	**$**	**2,680.00**
NMGRTX (7.0%)	**$**	**187.60**
TOTAL: Task 3	**$**	**2,867.60**
TOTAL: ALL TASKS	**$**	**9,104.50**
NMGRTX (7.0%)	**$**	**637.32**
GRAND TOTAL: ALL TASKS	**$**	**9,741.82**

State of New Mexico
Purchase Order

PO Number to be on all Invoices and Correspondence

Dispatch via Print

Purchase Order	Date	Revision	Page
52100-0000027961	11/30/2010		1
Payment Terms	**Freight Terms**		**Ship Via**
Pay Now	FOB Destination		Best Way
Buyer	**Phone**		
RACHEL D. HERRERA	505/476-3311		

Energy, Minerals & Resources
1220 South St. Francis Drive
Santa Fe NM 87505
United States

Vendor: 0000043982
INTERA INC
1812 CENTRE CREEK DR STE 300
AUSTIN TX 78754

Ship To: 1220 South St. Francis Drive
Room 346
Santa Fe NM 87501
United States

Bill To: 1220 South St. Francis Drive
Room 346
Santa Fe NM 87501
United States

Origin: **CON** **Exc\Excl #:**

Line-Sch	Item/Description	Mfg ID	Quantity UOM	PO Price	Extended Amt	Due Date
1- 1	Single groundwater monitoring event at former Enersource Refinery west of Monument, NM.		1.00 EA	11,203.09	11,203.09	11/30/2010
	52100-31100-0710000000-535300- -0750- - -111-00000					
			Schedule Total		11,203.09	
	Contract ID: 80-805-00-03377AD		Contract Line: 0	Release: 18		
			Item Total		11,203.09	

Price agreement # 80-805-00-03377
Expires on July 16, 2011

Total PO Amount 11,203.09

Agency Approval - I certify that the proposed purchase represented by this document is authorized by and is made in accordance with all State (and if applicable Federal) legislation rules and regulation. I further certify that adequate unencumbered cash and budget expenditure authority exists for this proposed purchase and all other outstanding purchase commitments and accounts payable.

Authorized Signature

STATE OF NEW MEXICO SPD-101A (07/92)
GENERAL SERVICES DEPARTMENT- PURCHASING DIVISION
TERMS AND CONDITIONS UNLESS OTHERWISE SPECIFIED

1. GENERAL: When the State Purchasing Agent issues a purchase document in response to the Vendors bid, a binding contract is created.
2. VARIATION IN QUANTITY: No variation in the quantity of any item called for by this order will be accepted unless such variation has been caused by conditions of loading, shipping, packing or allowances in manufacturing process, and then only to the extent, if any, specified elsewhere in this order.
3. ASSIGNMENT:
   A: Neither the order, nor any interest therein, nor claim thereunder, shall be assigned or transferred by the Vendor, except as set forth in subparagraph 3B below or as expressly authorized in writing by the STATE PURCHASASING AGENTS OFFICE. No such assignment or transfer shall relieve the Vendor from the obligations and liabilities under this order.
   B: Vendor agrees that any and all claims for overcharge resulting from antitrust violations which are borne by the State as to goods, services, and materials purchased in connection with this bid are hereby assigned to the State.
4. STATE FURNISHED PROPERTY: State furnished property shall be returned to the state upon request in the same condition as received except for ordinary wear, tear, and modifications ordered hereunder.
5. DISCOUNTS: Prompt payment discounts will not be considered in computing the low bid. Discounts for payment within 20 days will be considered after the award of the contract. Discounted time will be computed from the date of receipt of the merchandise or invoice, whichever is later.
6. INSPECTION: Final inspection and acceptance will be made at the destination. Supplies rejected at the destination for non-conformance with specifications shall be removed, at the Vendors risk and expense, promptly after notice of rejection.
7. INSPECTION OF PLANT: The State Purchasing Agent may inspect, at any reasonable time, the part of the contractors, or any subcontractors plant or place of business, which is related to the performance of this contract.
8. COMMERCIAL WARARANTY: The Vendor agrees that the supplies or services furnished under this order shall be covered by the most favorable commercial warranties the Vendor gives to any customer for such supplies or services, and that the rights and remedies provided herein shall extend to the State and are in addition to and do not limit any rights afforded to the State by any other cause of this order. Vendor agrees not to disclaim warranties of fitness for a particular purpose or merchantability.
9. TAXES: The unit price shall exclude all State taxes.
10. PACKING, SHIPPING AND INVOICING:
    A: The States purchase document number and the Vendors name, users name and location shall be shown on each packing and delivery ticket, package, bill of lading and other correspondence in connection with the shipment. The users count will be accepted by the Vendor as final and conclusive on all shipments not accompanied by a packing ticket.
    B: The Vendors invoice shall be submitted in triplicate, duly certified and shall contain the following information: order number, description of supplies or services, quantities, unit prices and extended totals. Separate invoices shall be rendered for each and every complete shipment.
    C: Invoices must be submitted to the using agency and NOT THE STATE PURCHASING AGENT.
11. DEFAULT: The State reserves the right to cancel all or any part of this order without cost to the State, if the Vendor fails to meet the provisions of this order and, except as otherwise provided herein, to hold the Vendor liable for any excess cost occasioned by the State due to the Vendors default. The Vendor shall not be liable for any excess costs if failure to perform the order arises out of causes beyond the control and without the fault or negligence of the Vendor, such causes include, but are not restricted to, acts of God or of the public enemy, acts of the State or of the Federal Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargos, unusually severe weather and defaults of subcontractors due to any of the above, unless the State shall determine that the supplies or services to be furnished by the subcontractor where obtainable from other sources in sufficient time to permit the Vendor to meet the required delivery scheduled. The rights and remedies of the State provided in this paragraph shall not be exclusive and are in addition to any other rights now being provided by law or under this order.
12. NON-COLLUSION: In signing this bid, the Vendor certifies he/she has not, either directly or indirectly, entered into action in restraint of free competitive bidding in connection with this proposal submitted to the State Purchasing Agent.
13. NON-DISCRIMINATION: Vendors doing business with the State of New Mexico must be in compliance with the Federal Civil Rights Act of 1964 and Title VII of that Act, Rev., 1979.
14. THE PROCUREMENT CODE: Sections 13-1-28 through 13-1-199 NMSA 1978 imposes civil and criminal penalties for its violation. In addition, the New Mexico criminal statutes impose felony penalties for bribes, gratuities and kickbacks.
15. All bid items are to be NEW and most current production, unless otherwise specified.
16. PAYMENT FOR PURCHASES: Except as otherwise agreed to: late payment charges may be assessed against the user state agency in the amount and under the conditions set forth in section 13-14158 NMSA 1978.
17. WORKERS COMPENSATION: The Contractor agrees to comply with state laws and rules pertaining to workers compensation benefits for its employees. If the Contractor fails to comply with Workers Compensation Act and applicable rules when required to do so, this (Agreement) may be terminated by the contracting agency.
18. PAY EQUITY RECORDING: The Contractor agrees to comply with New Mexico Pay Equity reporting requirements as detailed in Executive Order 2009-049 Implementation Guidance available at http://www.generalservices.state.nm.us/spd/guidance.pdf

Griswold, Jim, EMNRD

From: Joe Galemore <jgalemore@intera.com>
Sent: Friday, February 24, 2012 3:01 PM
To: Griswold, Jim, EMNRD
Cc: Eileen Romesser
Subject: enersource
Attachments: Enersource_Groundwater_Sampling_ SOW_Final_All_Files.pdf

Good afternoon Jim,

The Enersource sow/cost estimate is attached. The cost was a good bit higher than my original estimate because:

1. The sow/ce includes 4 inch wells but I think we can install 2 inch wells in some cases; I'm talking to Precision Sampling about unit costs for 2-inch wells
2. I assumed 1 mobilization originally but after talking to John Aguirre at Precision I think we will need 10 days to do just well install and development - John drilled first 6 wells when he was at Rodgers. This will take up first mob. Second mob will be specifically a groundwater monitoring event of all wells
3. Bonds and SLO permits are a little more pricey than expected
4. I added 504.1 to analyze for EDB. We havn't checked for low concentrations of this compound and I noticed we had some j flags on lab report for this compound using 8260.
5. I added a site visit for Jeff Palmer (tech in Carlsbad) to stake borings and meet with utility guys.

Let me or Eileen know if you have any questions and thank you for the opportunity.

Regards,

Joe A. Galemore
INTERA Incorporated
6000 Uptown Blvd., NE, Suite 220
Albuquerque, NM 87110
505.246.1600 (o)
505.239.6414 (c)
INTERA
Geosciences & Engineering

Delivering Excellence with Every Solution
www.INTERA.com

WORK PLAN AND COST ESTIMATE FOR ADDITIONAL SITE INVESTIGATION

Former Enersource Facility, Monument, Lea County, New Mexico

Submitted to:

State of New Mexico Energy, Minerals
& Natural Resources Department
Oil Conservation Division

Submitted by:

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ABBREVIATIONS AND ACRONYMS

µg/L	micrograms per liter
AST	above-ground storage tank
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
COC	contaminants of concern
DPT	direct-push technology
DRO	diesel range organics
EDC	1,2-dichloroethane
ft	feet *or* foot
GRO	gasoline range organics
HEAL	Hall Environmental Analysis Laboratory, Inc.
HSA	hollow-stem auger
INTERA	INTERA Incorporated
LNAPL	light non-aqueous phase liquid
mg/kg	milligrams per kilogram
MRO	motor oil range organics
OCD	New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division
OSE	New Mexico Office of the State Engineer
PA	Pricing Agreement
PID	photoionization detector
RI/RA	Remedial Investigation and Removal Action
Site	the former Enersource facility in Monument, Lea County, New Mexico
SLO	New Mexico State Land Office
SOP	standard operating procedure
SOW	scope of work
TPH	total petroleum hydrocarbons

1.0 INTRODUCTION

This work plan, which includes a scope of work (SOW) and cost estimate, is being submitted to the New Mexico Energy, Minerals and Natural Resources Department – Oil Conservation Division (OCD) to conduct additional investigation activities at the former Enersource facility (Site) in Monument, Lea County, New Mexico. A project location map is provided in Figure 1. This work plan was prepared in response to a verbal request from Mr. Jim Griswold of the OCD to Mr. Joe A. Galemore of INTERA Inc. (INTERA) in December 2011. The cost estimate provided in Appendix A is based on State of New Mexico, General Services Department, Pricing Agreement # 10-805-00-07208 (PA). The term of the PA is August 16, 2011, through August 15, 2012.

The purpose of the project for which this plan was developed is to characterize/delineate the southern, eastern, and western limits of dissolved-phased petroleum (specifically benzene) and light non-aqueous phase liquid (LNAPL) contamination emanating from the Site. The following subsection describes the Site and summarizes previous project activities. Section 2.0 of the work plan provides the proposed SOW for the groundwater quality sampling round. Sections 3.0 and 4.0 discuss the project schedule and cost estimate, respectively, and Section 5.0 provides references. The cost estimate details are provided in Appendix A.

1.1 Site Description and Project Background

The Site covers 9.56 acres and is located in the northwest quarter of Section 1, Township 20 South, Range 36 East, Lea County, New Mexico (Figure 1). The Site is at an elevation of approximately 3,580 feet (ft) above mean sea level. The surface in the vicinity slopes down from northwest to southeast at a gradient of approximately 0.003 ft/ft (16 ft/mile). Monument Draw, a northwest to southeast flowing intermittent stream, is located about 2 ½ miles south of the Site.

The estimated property boundary and the fenced area believed to have been used by Enersource operations are illustrated on Figure 2. Land in the area is used for oil and gas exploration/production and cattle ranching. The Versado Gas Processing Plant (remediation permit # 1R-281) is located immediately adjacent to the northern property boundary. El Paso Natural Gas operates a facility within 1,500 ft of the eastern property boundary. Numerous oil/gas wells, pump jacks, and storage tanks are in the vicinity. Remediation of light non-aqueous phase liquids (LNAPL) is ongoing at the Versado Plant, and depth to water ranges from 25 to 35 ft below ground surface (bgs) (Wrangham, personal communication, 2006)

A search of the New Mexico Office of the State Engineer (OSE) WATERS database revealed seven water wells within one mile of the Site and two within Section 1. The closest well is a

domestic supply well located approximately 2,000 ft north of the Site; no information concerning depth to water was provided in the WATERS database. The next closest well is also a domestic supply well located about 3,000 ft east of the Site. The WATERS database lists the depth to water in this well as 40 ft bgs.

Based on historical aerial photographs taken in 1949, 1966, and 1978, it appears that significant development at the Site occurred after 1949 (INTERA, 2009). The aerial photograph taken in 1949 reveals one large tank that straddles the Site boundary, but with the exception of some roads, the remainder of the Site is undeveloped. The 1966 and 1978 photographs show numerous (> 25) aboveground storage tanks (ASTs) located within or slightly outside the property boundary. The tanks are arranged in an eastern and a western cluster. The tank sizes within the western cluster are, in general, larger than the tanks in the eastern cluster. The two clusters of tanks are separated by a central area that contains buildings and, based on the shape of the shadows, tall narrow structures. Mr. Larry Parker, a long-time resident of Lea County and former employee of Controlled Recovery Incorporated, stated that the Site was used as a jet fuel refinery (INTERA, 2009). Therefore, these tall, narrow structures formerly located in the central part of the Site may be cracking or distillation towers. Given the larger tank sizes, the western part of the property was probably used for crude storage, and the eastern cluster for product storage. A tractor trailer truck can be seen in the 1978 aerial photograph just north of the central processing area; this area may have been used for product loading.

It is unknown how long refinery operations occurred at the Site. Based on information obtained from the Lea County Tax Assessor, Enersource became the property owner in 1985. Our understanding is that Enersource used the facility to reclaim crude oil until sometime prior to 2006 when INTERA was contracted by OCD. Mr. Parker stated that the structures formerly located in the central part of the Site were dismantled and sold for scrap. The structures and materials that were not sold were buried in the west-central portion of the Site. It is unknown when this occurred. As discussed below, this waste has been removed from the Site.

INTERA was contracted in 2006 to test the existing ASTs and fluids/sludge for naturally occurring radioactive materials and subsequently remove these materials from the Site. The ASTs and some underground piping were removed from the Site and disposed of at an offsite facility in the summer of 2006. During the removal action, soil samples were collected at several locations and analyzed for the presence of total petroleum hydrocarbons (TPH), diesel range and motor oil range organics (DRO and MRO), and chlorides. Concentrations for TPH-DRO ranged from 2,900 to 9,400 milligrams per kilogram (mg/Kg), only one concentration was detected for TPH-MRO (6,000 mg/Kg), and concentrations of chloride ranged from 4.7 to 570 mg/Kg.

In April 2007, a geophysical survey was performed to identify buried metal objects at the Site. The survey revealed the presence of several thousand feet of underground piping and large metal objects scattered throughout the Site. From May to June 2007, INTERA and its subcontractor removed these subsurface materials and disposed of them at an offsite facility. Trenching performed during the piping removal and soil samples collected during previous removal actions revealed contaminated soils in several areas (INTERA, 2007).

In June 2009, INTERA completed Remedial Investigation and Removal Action (RI/RA) activities (INTERA, 2009). Results of the RI/RA indicated that a release, or releases, of hydrocarbons at the former Famariss Energy Refinery and/or Enersource facility impacted soil and groundwater at the Site. The presence of TPH gasoline range organics (GRO) and 1,2-dichloroethane (EDC), coupled with the high benzene to BTEX (sum of benzene, toluene, ethylbenzene, and total xylenes) concentration ratios, indicate that a portion of the release was refined product or gas condensate. The high TPH, DRO, and MRO concentrations suggest that a release of crude oil also occurred at the Site.

Shallow soils (i.e., surface to 6 ft bgs) consist of sand, clayey sand, and caliche. An area greater than 2 acres contains TPH in soils at concentrations above NMED and OCD action levels. Benzene, BTEX, and chlorides at concentrations above action levels are also present in shallow soils, but within smaller areas. The most impacted areas containing benzene above action levels are present in the pit, central processing, product loading, and eastern AST areas.

Deep soils (i.e., > 6 ft bgs) consist of caliche, clayey sand, and sandy clay. The water table exists in these units at a depth of about 35 ft bgs. These soils are impacted with TPH, benzene, BTEX, and chlorides over a large area. This area could not be defined because the Direct Push Technology (DPT) borings could not be advanced past a very hard caliche layer that exists at an average depth of 7.5 ft bgs.

Excavation of the pit located in the southwest corner of the Site to a depth of 10 ft bgs resulted in the removal of approximately 4,000 cubic yards of contaminated soil. The excavated soil was disposed of in a nearby landfill because high chloride concentrations precluded disposal in a landfarm. Confirmation soil sampling indicated that soil containing TPH (and possibly benzene, BTEX, and chloride) above action levels remains below and along the side walls of the excavation.

The estimated groundwater flow direction on June 25, 2009, was towards the southeast, and the hydraulic gradient is estimated to be 0.002 ft/ft.

On June 25, 2009, LNAPL was present on the water table in MW-03 at a thickness of 1.42 ft. It is noteworthy that this is the most downgradient well installed at the Site, suggesting that

LNAPL may be present at offsite locations. Dissolved-phase benzene was present in groundwater at concentrations that were one to two orders of magnitude above NMWQCC standards in samples collected from MW-02, MW-03, MW-05, and MW-06.

The last groundwater monitoring event occurred in January 2011 (INTERA, 2011). Dissolved-phase benzene was detected at a concentration of 2,600 micrograms per liter (µg/L), 480 µg/L, and 6,200 µg/L in MW-02, MW-05, and MW-06, respectively. These concentrations exceed the NMWQCC standard of 10 µg/L. No other contaminants of concern (COCs) were detected at concentrations above NMWQCC standards. Based on this groundwater monitoring event, it was concluded that the extent of dissolved-phase benzene had not been well defined in the southern or northeastern portions of the Site. It is likely that contamination has migrated offsite to the south and the extent of LNAPL is not defined. INTERA recommended an LNAPL baildown/recovery test and further investigations to determine the magnitude, nature, and extent of contamination.

2.0 SCOPE OF WORK

INTERA has divided the project SOW into the following tasks:

- Task 1 – Project Planning/Scheduling
- Task 2 – Field Activities
- Task 3 – Reporting

2.1 Task 1 — Project Planning/Scheduling

Prior to starting investigation field work, several activities need to be completed to ensure that the objectives of the project are understood, and that the data needed to meet project objectives will be collected safely and legally, and are of appropriate quality to support decision making. The objectives and related activities of Task 1 are to:

- Review OCD files to ensure that the number and locations of proposed wells are optimal.
- Obtain permission to legally access the Site property.
- Apply for and receive monitoring well permits necessary for doing the work
- Schedule and execute formal agreements with subcontractors that provide clear SOWs and project terms and conditions.
- Develop and finalize a work plan that details health and safety and quality assurance and control procedures along with a detailed scope of work.

- Check for access, stake boring locations, and contact New Mexico One Call to locate underground utilities.

The first activity will include a review of investigation/remediation files for the Versado Gas Processing Plant and the El Paso Natural Gas facility, which are located immediately adjacent to Enersource's, northern and eastern property boundaries, respectively. The review will focus on identifying (1) monitoring well locations, (2) monitoring well construction details, (3) groundwater flow direction, and (4) contaminant plume nature, extent, and magnitude. A brief summary of the findings of the file review will be presented in the work plan and, if warranted, monitoring well locations proposed for the Enersource investigation will be modified to incorporate file-review findings.

The next activity of Task 1 will include obtaining access to drill on New Mexico State Land Office (SLO) property. INTERA will complete the paper work and pay the fee necessary to gain access. However, INTERA's understanding is that the access agreement will be between the OCD and the SLO; consequently, the OCD will need to sign the access agreement.

In accordance with the PA, a performance bond will be secured by INTERA. This bond will be forwarded to OCD prior to the commencement of field activities. The bond will be in an amount equal to 100 percent of the contract order.

The OSE requires that monitoring wells be permitted prior to drilling. These permits will be applied for and obtained in Task 1. INTERA will complete the forms and pay the fees; however, as with the access agreement, OCD will need to sign the forms. The permits will be forwarded to the drilling contractor upon receipt.

Prior to initiating field work, agreements will be formalized with the drilling contractor, the investigation-derived waste management service company, and the land surveyor. INTERA anticipates that Precision Sampling will perform the drilling/sampling and well installation, Gandy Marley Company will provide transportation and disposal, and John West Surveying Company will provide the monitoring well surveying services. The agreements will include insurance requirements and a schedule.

Once permits are received and file review information is evaluated, the work plan will be modified. The modification will include the following:

- Maps illustrating proposed well locations.
- Copies of access agreements and OSE monitoring well permits.
- A Site-specific Health and Safety Plan.

- A sampling and analysis plan summary.
- INTERA standard operating procedures (SOPs).

The last activity of Task 1 is to request from New Mexico One Call (NMOC) (and other companies not included in the NMOC network) a meeting to locate underground utilities. A technician from INTERA's Carlsbad office will then perform a Site reconnaissance to (1) determine if drilling equipment and support vehicles can access the proposed soil boring locations, and (2) meet with underground utility company representatives. Once proposed locations have been cleared, they will be staked so that the locations are easily located by the INTERA scientist that will be performing Task 2 field activities.

2.2 Task 2 — Field Activities

The objective of Task 2 is to obtain data that can be used to determine the nature, extent, and magnitude of contamination emanating from the former Enersource facility and to evaluate options for the recovery of LNAPL that has historically been observed in MW-03 (Figures 2 and 3). To this end, Task 2 will consist of the drilling and sampling of nine soil borings at the locations illustrated on Figures 2 and 3. The first five soil borings will be located south (downgradient), west, and east of previously installed wells. If contamination is observed (high photoionization detector [PID] readings, staining, etc.) in these soil boring locations, four additional borings will be advanced at a second set of locations farther south (downgradient) and east as indicated on Figures 2 and 3. Details of the soil boring advancement and soil sampling and analysis are detailed below in Section 2.2.1. The specifics of how the monitoring wells will be installed, developed, surveyed, sampled, and analyzed are provided in Section 2.2.2.

2.2.1 Soil Boring Advancement, Soil Sampling, and Soil Analysis

The anticipated depth for each soil boring is 50 ft bgs, which is an estimated 15 ft below the water table. The drilling of each borehole shall be completed using a hollow-stem auger (HSA) drilling rig (CME 75 [high torque], 85, 95, or equivalent) with a 10 ½-inch bit for the 4-inch wells.

Soil borings will be continuously sampled using either a 5-ft-long continuous sampler or an 18-inch-long (or 24-inch-long) split-spoon sampler. Attempts will be made to sample caliche; however, sample refusal is anticipated. Shorter sample runs (2 to 2.5 ft) may be required in sand intervals. The cores will be lithologically logged and field screened for the presence of volatile organic compounds (VOCs). Samples will be collected for possible laboratory analysis using the methods detailed in INTERA SOP 5 (*Hollow-Stem Auger Drilling*). A PID equipped with a 10.6 electron volt lamp will be used to assist in the screening of the samples for VOCs. PID readings will be recorded on the soil boring log maintained by the INTERA scientist or engineer.

A maximum of one sample per boring will be collected for laboratory analysis as detailed in INTERA SOP 5. The selection of the samples to be analyzed will be based on field screening results, i.e., the sample having the highest PID reading (or staining/olfactory evidence) will be selected for laboratory analysis. If the PID does not detect any volatile organic vapors and no other evidence of impact is observed, only a sample from the water table will be collected for analysis.

Selected soil samples will be analyzed for:

- VOCs by U.S. Environmental Protection Agency (EPA) Method 8260B (with methanol extraction)
- TPH-GRO, DRO, and MRO by EPA Method 8015B (with methanol extraction for TPH-GRO)
- PAHs by EPA Method 8270 selective ion monitoring
- Chloride by EPA method 9056A

Samples selected for VOC and TPH-GRO analyses will be extracted in the field with methanol in accordance with the procedure detailed in INTERA SOP 5. Soil samples will be submitted to Hall Environmental Analysis Laboratory, Inc. (HEAL) of Albuquerque, New Mexico, under chain of custody as detailed in INTERA SOP 5.

2.2.2 Groundwater Monitoring Well Installation, Development, and Sampling/Analysis

The soil borings discussed above will be converted to a maximum of nine monitoring wells using the procedures specified in SOP 7 (*Monitoring Well Installation*). The wells will remain in tension during the installation process, and each well will consist of:

- 4-inch diameter, schedule 40, flush-thread PVC with O-rings.
- 15 ft of 0.020 slot screen (with 5-ft above and 10-ft below the water table).
- A flush-threaded end cap.
- 10/20 or 8/16 gradation silica sand primary filter pack from 1 ft below the well to 3 ft above the top of screen.
- 1 ft of 20/40 gradation filter pack sand on top of the primary filter pack.
- A 3- to 5-ft granular (# 6 or #8 mesh) bentonite seal above the secondary filter pack emplaced in 1-ft lifts and hydrated as specified by the manufacturer. Sufficient time should be allowed for the bentonite seal to hydrate or expand prior to grouting.

- Cement/bentonite (95%/5% by volume) grout to fill the remainder of the annular space to a depth of approximately 3-ft bgs.
- PVC extending 3-ft above grade. The north side of the PVC will be marked with a black sharpie or notched to provide a reference point for future surveying and depth to water and total depth measurements.
- A lockable j-plug at the top of monitoring well.

The wells will be completed with:

- An above-ground, sloped, 3 ft x 3 ft concrete pad (minimum thickness of 4-inches).
- A locking standpipe that extends 6 inches above the top of well PVC.
- An above-grade annular space between the well and stand pipe to be filled with sand.
- Three bollards.

Prior to developing each well, the grout will be allowed to cure until it has set for a minimum of 24 hours to prevent a break in the seal between the grout and well. The wells will be developed for a maximum of one hour using the procedure specified in INTERA SOP 8 (*Monitoring-Well Development*). Development will consist of bailing, swabbing, and pumping techniques or other applicable means. During development activities, turbidity and groundwater parameters will be monitored by INTERA.

No sooner than 48 hours after development, the new wells discussed above and existing wells MW-01 through MW-06 will be gauged and sampled using three-casing volume purging or low-flow sampling techniques as specified in INTERA SOP 9 (*Monitoring Well Gauging*) and SOP 10 (*Monitoring Well Sampling for Groundwater*). An interface probe will be used to check for LNAPL. Groundwater monitoring wells containing LNAPL will not be sampled.

A maximum of 15 groundwater samples will be analyzed as follows:

- VOCs (and total naphthalenes) by EPA Method 8260B
- Ethylene dibromide by EPA Method 504.1
- Dissolved Chloride by EPA Method 300.0
- Total Dissolved Solids by modified method SM 2540C

Samples will be collected as specified in INTERA SOP 10 (*Monitoring Well Sampling for Groundwater*). Proper chain-of-custody procedures will be adhered to during sample collection, transport, and delivery to HEAL.

2.2.3 LNAPL Baildown Test

If LNAPL is measured in MW-03 at a thickness of greater than 0.5 ft, INTERA will conduct a baildown/recovery test to determine the recovery rate of LNAPL. The baildown test will be done in general accordance with guidance provided in the document titled "How to Effectively Recover Free Product at Leaking Underground Storage Tank Sites – A Guide for State Regulators" (EPA, 1996). The test will consist of evacuating the LNAPL as quickly as possible from the well using a bailer. After the product has been bailed down, the groundwater and LNAPL recharge rates will be monitored until the measured thickness is 80 percent of the original thickness or 24 hours has passed, whichever comes first. The frequency of depth to product and depth to water measurements will be taken is as follows:

- Once immediately before bailing LNAPL.
- Once every minute for the first five minutes.
- Every five minutes for the first half hour.
- On the hour every hour until 8 hours have passed.
- Once after 24 hours have passed.

This measurement schedule is subject to change dependent on field conditions. Plans for this test are based on the assumption that measurable groundwater will be observed in the well. Should the LNAPL displace the groundwater in the well, the baildown test will consist of bailing the LNAPL from the well and monitoring the rate of recovery of LNAPL back into the well. The volume of recovered LNAPL and the final LNAPL thickness will be documented and reported. Recovered LNAPL will be stored on-site in a properly labeled 55-gallon drum.

2.2.4 Surveying

Once the wells are installed, a New Mexico licensed surveyor will survey the new well locations. The survey will include northing and easting of the measuring point relative to the North American Datum of 1927, New Mexico East Zone.

2.2.5 Quality Assurance

Soil and groundwater sampling will follow the INTERA's SOPs listed above. In addition, INTERA SOP 2 (*Decontamination*) will be followed before and after the collection of each soil and groundwater sample. Field personnel will be degreed professionals in geology, hydrology, or engineering. Field instruments will be calibrated in accordance with manufacturer recommendations.

For all field work conducted, INTERA field personnel will use permanently bound field logbooks to record and document field activities. The logbook will list the contract name and number, the project number, the Site name, and the names of the client and the project manager. At a minimum, the following will be recorded in the field logbook:

- Names and affiliations of all on-site personnel or visitors.
- Weather conditions during the field activity.
- A summary of daily activities and significant events.
- Discussions of problems encountered and their resolutions.
- Notes of conversations involving major decisions.
- Discussions of any deviations from the work plan.

2.2.6 Investigation Derived Waste Management

Soil and groundwater waste will be generated during the investigation. Soil cuttings generated during drilling activities will be segregated based on field screening results. Cuttings from intervals that have PID readings of 100 ppmv or greater will be drummed; cuttings from intervals that have PID readings of less than 100 ppmv will be thin-spread on site. Drummed cuttings will be transported by a licensed contractor and disposed of at a licensed facility. A waste manifest and transportation ticket will need to be signed by an OCD representative. Groundwater waste will be poured onto impermeable surfaces and allowed to evaporate.

2.3 Task 3 — Reporting

Upon completion of Task 2 and receipt of the laboratory and survey data, INTERA will prepare a report documenting results of the soil and groundwater sampling activities. The report will provide a summary of the findings of the file review, detail site investigation methods, discuss findings, and provide conclusions and recommendations. Tables will be provided that summarize soil screening results, fluid level data, and soil and groundwater laboratory testing results. Field notes, photographic documentation, soil boring logs, well construction schematics, and copies of permits will be included as appendices. The following figures will be provided:

- A project location map
- A Site plan showing monitoring well locations
- A geologic cross section
- A potentiometric surface map
- Distribution of contaminants in soil
- Distribution of contaminants in groundwater

3.0 SCHEDULE

INTERA will begin scheduling and project coordination as soon as possible after the OCD has issued a purchase order for the investigation. The estimated time to complete the project is:

- Task 1: 14 calendar days
- Task 2: 30 calendar days
- Task 3: 14 calendar days

4.0 COST ESTIMATE

The cost estimate to provide the services described above is included as Appendix A. INTERA's services will be provided on a time and material price basis. INTERA will not exceed these costs without first requesting and then obtaining approval for an amendment to this budget.

5.0 REFERENCES

INTERA, 2007. *Phase I and II Remediation, Former Enersource Facility, Monument, Lea County, New Mexico*. June 29.

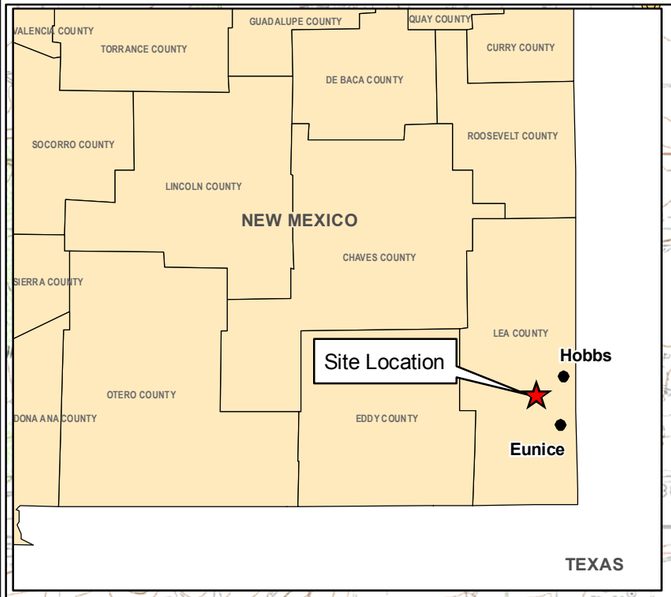
INTERA, 2009. *Remedial Investigation and Removal Action Report, Former Enersource Facility, Monument, Lea County, New Mexico*. December 4.

INTERA, 2011. *January 2011 Groundwater Monitoring Report. Former Enersource Facility, Monument, Lea County, New Mexico.* March 9.2011.

U.S. Environmental Protection Agency, 1996. How to Effectively Recover Free Product at Leaking Underground Storage Tank Sites – A Guide for State Regulators.

Wrangham, Cal, 2006. Personal communication. Targa Resources (current operator of the Versado Plant).

FIGURES



Versado Gas Processing Plant

El Paso Natural Gas Facility

Monument

Monument

N

S

0 1,000 2,000 4,000 Feet

USGS 7.5 Minute Topographic Map:
Monument North Quadrangle,
1985, Contour Interval 10 Feet;
Monument South Quadrangle,
1985, Contour Interval 5 Feet;
Hobbs West and Hobbs SW Quadrangles,
1969/revised 1979, Contour Interval 5 Feet
Site Location: NW¼ Sec. 1; T20S; R36E

Legend

- Property Boundary

WATERS Database Well Locations

- DOM - Domestic
- PRO - Prospecting/Dev. of Natural Resources
- EXP - Exploration
- MUL - Multiple Domestic
- POL - Pollution Control
- STK - Livestock Watering
- IRR - Irrigation
- SAN - Sanitary

Source(s):
Wells – WATERS database, 2008;
Topos – MapTech/USGS.

Figure 1
Project Location Map
with Vicinity Wells

Enersource Site – Monument, NM

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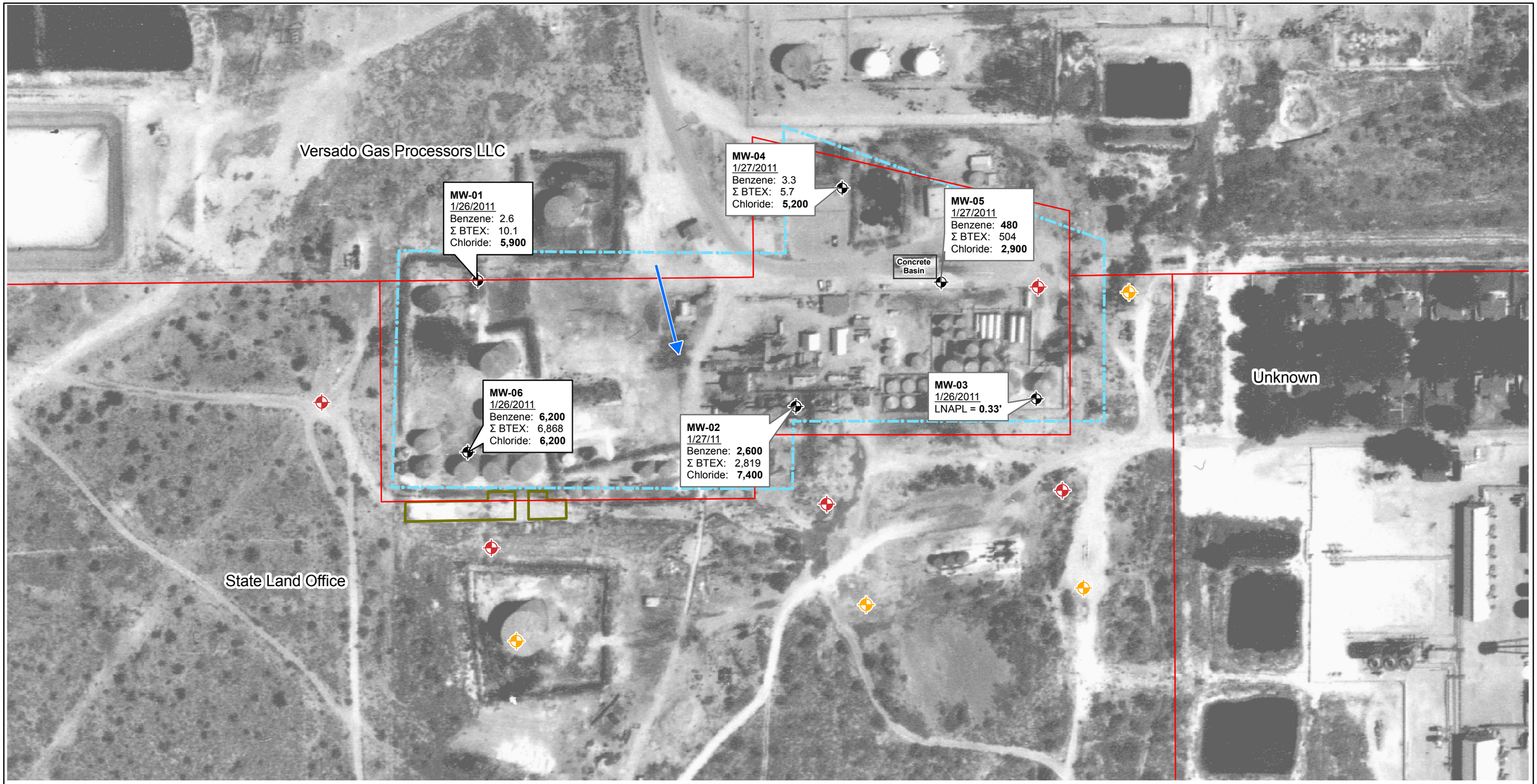

N
S

0 75 150 300 Feet

Legend

- First SB/MW Location
- Second SB/MW Location
- Existing Monitoring Well Location
- Property Boundary
- Excavation Area
- Parcel Boundaries/Ownership

Sample Location
Sample Date
Analyte: Result

Source(s): 1978 aerial photo – NMDOT;
Property boundary/monitoring wells – John West Surveying Co., Hobbs, NM.
Parcel boundaries - Lea County, 5/2011

Notes:
1. Results are in µg/L except Chloride (mg/L)
2. **Bold** indicates concentration above NMWQCC Standard
3. Σ BTEX = Sum of Benzene, Toulene, Ethyl benzene, and total Xylenes concentrations
4. LNAPL = LNAPL Thickness (feet)

Estimated Groundwater Flow Direction, 1/26/2011

Figure 2
Proposed Soil Borings/Monitoring Well on 1978 Aerial Photograph
Enersource Site – Monument, NM

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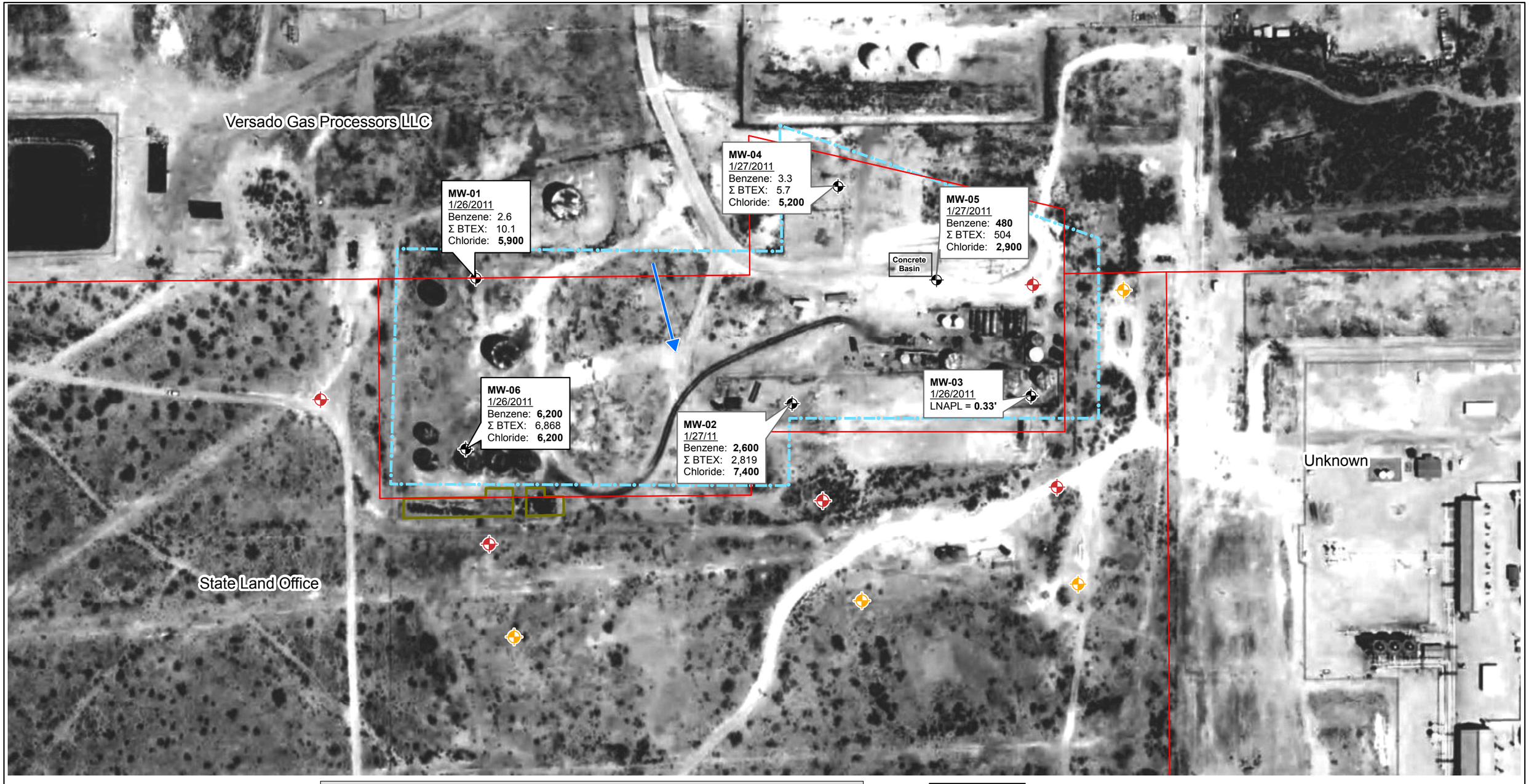

N

S

0 75 150 300 Feet

Legend

- First SB/MW Location
- Second SB/MW Location
- Existing Monitoring Well Location
- Property Boundary
- Excavation Area
- Parcel Boundaries\Ownership

Sample Location
Sample Date
Analyte: Result

Notes:
1. Results are in µg/L except Chloride (mg/L)
2. **Bold** indicates concentration above NMWQCC Standard
3. Σ BTEX = Sum of Benzene, Toulene, Ethyl benzene, and total Xylenes concentrations
4. LNAPL = LNAPL Thickness (feet)

Estimated Groundwater Flow Direction, 1/26/2011

Source(s): 2004 aerial photo – EDAC;
Property boundary/monitoring wells – John West Surveying Co., Hobbs, NM.
Parcel boundaries - Lea County, 5/2011

Figure 3
Proposed Soil Borings/Monitoring Well on 2004 Aerial Photograph
Enersource Site – Monument, NM

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APPENDIX A

Project Cost Estimate

APPENDIX A
Cost Estimate for Additional Site Investigation
Former Enersource Facility
Monument, Lea County, New Mexico
February 24, 2012

Labor			Task 1 Project Planning		Task 2 Field Activities		Task 3 Reporting		Total: Task 1-3 Project Total	
	Rate	Units	Units	Price	Units	Price	Units	Price	Units	Price
Principal	$150	Hours	10	$1,500.00	16	$2,400.00	16	$2,400.00	42	$6,300.00
Senior Scientist	$114	Hours		$0.00		$0.00		$0.00	0	$0.00
Project Engineer/Scientist	$94	Hours		$0.00		$0.00		$0.00	0	$0.00
Staff Engineer/Scientist	$83	Hours	40	$3,320.00	256	$21,248.00	40	$3,320.00	336	$27,888.00
Technician	$75	Hours	8	$600.00		$0.00		$0.00	8	$600.00
Draftsperson	$64	Hours	8	$512.00		$0.00	50	$3,200.00	58	$3,712.00
Administrator	$69	Hours		$0.00		$0.00		$0.00	0	$0.00
Clerk	$49	Hours		$0.00		$0.00		$0.00	0	$0.00
Labor Subtotal				**$5,932.00**		**$23,648.00**		**$8,920.00**		**$38,500.00**
Subcontractors/Permit Fees										
Bond	$1,800	lump sum	1	$1,800.00		$0.00		$0.00	1	$1,800.00
SLO Property Access Fee	$4,175	lump sum	1	$4,175.00		$0.00		$0.00	1	$4,175.00
NMOSE Monitoring Well Fee	$5	Day	9	$45.00		$0.00		$0.00	9	$45.00
Drilling										
Mobilization	$4,950	Each		$0.00	1	$4,950.00		$0.00	1	$4,950.00
Boring and MW Installation	$37	Ft		$0.00	450	$16,650.00		$0.00	450	$16,650.00
Grout Borings	$8.50	Ft		$0.00	0	$0.00		$0.00	0	$0.00
Development	$100	Hour		$0.00	9	$900.00		$0.00	9	$900.00
Surface Completion	$300	Well		$0.00	9	$2,700.00		$0.00	9	$2,700.00
Support Truck/Decon	$175	Day		$0.00	11	$1,925.00		$0.00	11	$1,925.00
Per Diem	$250	Day		$0.00	11	$2,750.00		$0.00	11	$2,750.00
Drums	$62	Well		$0.00	18	$1,116.00		$0.00	18	$1,116.00
Stand By	$185	Hour		$0.00		$0.00		$0.00	0	$0.00
Laboratory										
Soil-VOCs (8260B)	$130	Each		$0.00	9	$1,170.00		$0.00	9	$1,170.00
Soil-TPH (8015B)	$90	Each		$0.00	9	$810.00		$0.00	9	$810.00
Soil-Chloride (300.0)	$25	Each		$0.00	9	$225.00		$0.00	9	$225.00
Soil-PAHs (8270 - SIM)	$150	Each		$0.00	9	$1,350.00		$0.00	9	$1,350.00
GW-VOCs (8260B)	$120	Each		$0.00	15	$1,800.00		$0.00	15	$1,800.00
GWr-EDB (504.1)	$45	Each		$0.00	15	$675.00		$0.00	15	$675.00
GW - Dissolved Chloride (300.0)	$15	Each		$0.00	15	$225.00		$0.00	15	$225.00
GW -TDS (2540C)	$15	Each		$0.00	15	$225.00		$0.00	15	$225.00
Filters	$20	Each		$0.00	15	$300.00		$0.00	15	$300.00
Survey	$2,100	Day		$0.00	1	$2,100.00		$0.00	1	$2,100.00
Waste Management - Mobilization	$250	Each		$0.00	1	$250.00		$0.00	1	$250.00
Waste Management - Drum Disposal	$44	Each		$0.00	18	$792.00		$0.00	18	$792.00
Fee	0%	%		$0.00	$40,913.00	$0.00		$0.00	40913	$0.00
Subcontractor Subtotal				**$6,020.00**		**$40,913.00**		**$0.00**		**$46,933.00**
Direct Expenses										
Gas Detection and Sampling Equipment (PID)	$90	Day		$0.00	11	$990.00		$0.00	11	$990.00
Water Quality Meter	$100	Day		$0.00	15	$1,500.00		$0.00	15	$1,500.00
Expendable Field Equipment	$150	Day		$0.00	15	$2,250.00		$0.00	15	$2,250.00
Per Diem	$140	Day		$0.00	21	$2,940.00		$0.00	21	$2,940.00
Per Diem (Partial - Meals)	$40	Day		$0.00	3	$120.00		$0.00	3	$120.00
Light Truck	$0.79	Mile	140	$110.60	1690	$1,335.10		$0.00	1830	$1,445.70
Misc. Field Equipment	$75	Day		$0.00	15	$1,125.00		$0.00	15	$1,125.00
Expenses Subtotal				**$110.60**		**$10,260.10**		**$0.00**		**$10,370.70**

Subtotal	**$95,803.70**
NM GR Tax	**$6,706.26**
Project Total	**$102,509.96**

State of New Mexico
Purchase Order

PO Number to be on all Invoices and Correspondence

Dispatch via Print

Purchase Order	Date	Revision	Page
52100-0000034718	03/09/2012		1

Payment Terms	Freight Terms	Ship Via
Pay Now	FOB Destination	Best Way

Buyer	Phone
RACHEL D. HERRERA	505/476-3311

Energy, Minerals & Resources
1220 South St. Francis Drive
Santa Fe NM 87505
United States

Vendor: 0000043982
INTERA INC
1812 CENTRE CREEK DR STE 300
AUSTIN TX 78754

Ship To: 1220 South St. Francis Drive
Room 346
Santa Fe NM 87501
United States

Bill To: 1220 South St. Francis Drive
Room 346
Santa Fe NM 87501
United States

Origin: **CON** **Exc\Excl #:**

Line-Sch	Item/Description	Mfg ID	Quantity UOM	PO Price	Extended Amt	Due Date
1- 1	Additional environmental investigation at Former Enersource/Famaris Refinary located west of Monument, New Mexico		1.00 EA	112,760.95	112,760.95	03/09/2012

52100-31100-0710000000-535300- -0750- - -112-10000

Schedule Total 112,760.95

Contract ID: 10-805-00-07208AC Contract Line: 0 Release: 3

Item Total 112,760.95

Total PO Amount 112,760.95

Agency Approval - I certify that the proposed purchase represented by this document is authorized by and is made in accordance with all State (and if applicable Federal) legislation rules and regulation. I further certify that adequate unencumbered cash and budget expenditure authority exists for this proposed purchase and all other outstanding purchase commitments and accounts payable.

Authorized Signature

John H Bemis

STATE OF NEW MEXICO SPD-101A (07/92)
GENERAL SERVICES DEPARTMENT- PURCHASING DIVISION
TERMS AND CONDITIONS UNLESS OTHERWISE SPECIFIED

1. GENERAL: When the State Purchasing Agent issues a purchase document in response to the Vendors bid, a binding contract is created.
2. VARIATION IN QUANTITY: No variation in the quantity of any item called for by this order will be accepted unless such variation has been caused by conditions of loading, shipping, packing or allowances in manufacturing process, and then only to the extent, if any, specified elsewhere in this order.
3. ASSIGNMENT:
   A: Neither the order, nor any interest therein, nor claim thereunder, shall be assigned or transferred by the Vendor, except as set forth in subparagraph 3B below or as expressly authorized in writing by the STATE PURCHASASING AGENTS OFFICE. No such assignment or transfer shall relieve the Vendor from the obligations and liabilities under this order.
   B: Vendor agrees that any and all claims for overcharge resulting from antitrust violations which are borne by the State as to goods, services, and materials purchased in connection with this bid are hereby assigned to the State.
4. STATE FURNISHED PROPERTY: State furnished property shall be returned to the state upon request in the same condition as received except for ordinary wear, tear, and modifications ordered hereunder.
5. DISCOUNTS: Prompt payment discounts will not be considered in computing the low bid. Discounts for payment within 20 days will be considered after the award of the contract. Discounted time will be computed from the date of receipt of the merchandise or invoice, whichever is later.
6. INSPECTION: Final inspection and acceptance will be made at the destination. Supplies rejected at the destination for non-conformance with specifications shall be removed, at the Vendors risk and expense, promptly after notice of rejection.
7. INSPECTION OF PLANT: The State Purchasing Agent may inspect, at any reasonable time, the part of the contractors, or any subcontractors plant or place of business, which is related to the performance of this contract.
8. COMMERCIAL WARARANTY: The Vendor agrees that the supplies or services furnished under this order shall be covered by the most favorable commercial warranties the Vendor gives to any customer for such supplies or services, and that the rights and remedies provided herein shall extend to the State and are in addition to and do not limit any rights afforded to the State by any other cause of this order. Vendor agrees not to disclaim warranties of fitness for a particular purpose or merchantability.
9. TAXES: The unit price shall exclude all State taxes.
10. PACKING, SHIPPING AND INVOICING:
    A: The States purchase document number and the Vendors name, users name and location shall be shown on each packing and delivery ticket, package, bill of lading and other correspondence in connection with the shipment. The users count will be accepted by the Vendor as final and conclusive on all shipments not accompanied by a packing ticket.
    B: The Vendors invoice shall be submitted in triplicate, duly certified and shall contain the following information: order number, description of supplies or services, quantities, unit prices and extended totals. Separate invoices shall be rendered for each and every complete shipment.
    C: Invoices must be submitted to the using agency and NOT THE STATE PURCHASING AGENT.
11. DEFAULT: The State reserves the right to cancel all or any part of this order without cost to the State, if the Vendor fails to meet the provisions of this order and, except as otherwise provided herein, to hold the Vendor liable for any excess cost occasioned by the State due to the Vendors default. The Vendor shall not be liable for any excess costs if failure to perform the order arises out of causes beyond the control and without the fault or negligence of the Vendor, such causes include, but are not restricted to, acts of God or of the public enemy, acts of the State or of the Federal Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargos, unusually severe weather and defaults of subcontractors due to any of the above, unless the State shall determine that the supplies or services to be furnished by the subcontractor where obtainable from other sources in sufficient time to permit the Vendor to meet the required delivery scheduled. The rights and remedies of the State provided in this paragraph shall not be exclusive and are in addition to any other rights now being provided by law or under this order.
12. NON-COLLUSION: In signing this bid, the Vendor certifies he/she has not, either directly or indirectly, entered into action in restraint of free competitive bidding in connection with this proposal submitted to the State Purchasing Agent.
13. NON-DISCRIMINATION: Vendors doing business with the State of New Mexico must be in compliance with the Federal Civil Rights Act of 1964 and Title VII of that Act, Rev., 1979.
14. THE PROCUREMENT CODE: Sections 13-1-28 through 13-1-199 NMSA 1978 imposes civil and criminal penalties for its violation. In addition, the New Mexico criminal statutes impose felony penalties for bribes, gratuities and kickbacks.
15. All bid items are to be NEW and most current production, unless otherwise specified.
16. PAYMENT FOR PURCHASES: Except as otherwise agreed to: late payment charges may be assessed against the user state agency in the amount and under the conditions set forth in section 13-14158 NMSA 1978.
17. WORKERS COMPENSATION: The Contractor agrees to comply with state laws and rules pertaining to workers compensation benefits for its employees. If the Contractor fails to comply with Workers Compensation Act and applicable rules when required to do so, this (Agreement) may be terminated by the contracting agency.
18. PAY EQUITY RECORDING: The Contractor agrees to comply with New Mexico Pay Equity reporting requirements as detailed in Executive Order 2009-049 Implementation Guidance available at http://www.generalservices.state.nm.us/spd/guidance.pdf

Scott A. Verhines, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 503093
File Nbr: L 12993

May. 02, 2012

JOE A. GALEMORE
INTERA INCORPORATED
6000 UPTOWN BLVD, NE
SUITE 220
ALBUQUERQUE, NM 87110

Greetings:

Enclosed is your copy of the above numbered permit that has been approved subject to the conditions set forth on the approval page. In accordance with the conditions of approval, the well can only be tested for 10 cumulative days, unless a permit to use the water is acquired from this office.

A Well Record & Log (OSE Form wr-20) shall be filed in this office within twenty (20) days after completion of drilling, but no later than 05/31/2013.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us or will be mailed upon request.

Sincerely,

Margaret Wolf
(575)622-6521

Enclosure

explore

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE/ MONITOR

SPECIFIC CONDITIONS OF APPROVAL

1B Depth of the well shall not exceed the thickness of the Ogallala formation.

4 No water shall be appropriated and beneficially used under this permit.

B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated.

C Driller's well record must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request.

LOG The Point of Diversion L 12993 POD1 must be completed and the Well Log filed on or before 05/31/2013.

LOG The Point of Diversion L 12993 POD2 must be completed and the Well Log filed on or before 05/31/2013.

LOG The Point of Diversion L 12993 POD3 must be completed and the Well Log filed on or before 05/31/2013.

LOG The Point of Diversion L 12993 POD4 must be completed and the Well Log filed on or before 05/31/2013.

LOG The Point of Diversion L 12993 POD5 must be completed and the Well Log filed on or before 05/31/2013.

LOG The Point of Diversion L 12993 POD6 must be completed and the Well Log filed on or before 05/31/2013.

Trn Desc: L 12993 (9 MONITOR WELLS)

File Number: L 12993
Trn Number: 503093

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE / MONITOR

SPECIFIC CONDITIONS OF APPROVAL (Continued)

LOG The Point of Diversion L 12993 POD7 must be completed and the Well Log filed on or before 05/31/2013.

LOG The Point of Diversion L 12993 POD8 must be completed and the Well Log filed on or before 05/31/2013.

LOG The Point of Diversion L 12993 POD9 must be completed and the Well Log filed on or before 05/31/2013.

No water shall be diverted from these wells except for testing purposes which shall not exceed ten (10) cumulative days unless a permit to use water from these wells is acquired from the Office of the State Engineer.

Should the permittee change the purpose of use to other than monitoring purposes, an application shall be acquired from the Office of the State Engineer.

The wells shall be constructed, maintained and operated that each water shall be confined to the aquifer in which it is encountered.

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 05/01/2012	Pub. of Notice Ordered:
Date Returned - Correction:	Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 02 day of May A.D., 2012

Scott A. Verhines, P.E., State Engineer

By: Andy Morley

Trn Desc: L 12993 (9 MONITOR WELLS)

File Number: L 12993
Trn Number: 503093

File No.

NEW MEXICO OFFICE OF THE STATE ENGINEER

APPLICATION FOR PERMIT TO DRILL A WELL WITH NO CONSUMPTIVE USE OF WATER

(check applicable box):

2-31370 $45

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose:	☐ Pollution Control And / Or Recovery	☐ Geo-Thermal
☐ Exploratory	☐ Construction Site De-Watering	☐ Other (Describe):
☒ Monitoring	☐ Mineral De-Watering	

A separate permit will be required to apply water to beneficial use.

STATE ENGINEER OFFICE ROSWELL
2012 MAY -1 P 2:42

☐ Temporary Request - Requested Start Date: Requested End Date:

Plugging Plan of Operations Submitted? ☐ Yes ☒ No

1. APPLICANT(S)

Name: **New Mexico Energy, Minerals, and Natural Resources; Oil Conservation Division**	Name: **INTERA Incorporated**
Contact or Agent: **Jim Griswold** check here if Agent ☐	Contact or Agent: **Joe A. Galemore** check here if Agent ☒
Mailing Address: **1220 South St. Francis Drive**	Mailing Address: **6000 Uptown Blvd., NE; Suite 220**
City: **Santa Fe**	City: **Albuquerque**
State: **NM** Zip Code: **87505**	State: **NM** Zip Code: **87110**
Phone: ☐ Home ☐ Cell Phone (Work): **505-476-3465**	Phone: ☐ Home ☐ Cell Phone (Work): **505-246-1600**
E-mail (optional): **jim.griswold@state.nm.us**	E-mail (optional): **jgalemore@intera.com**

FOR OSE INTERNAL USE

Application for Permit, Form wr-07, Rev 8/25/11

File Number: L-12993	Trn Number: 503093
Trans Description (optional): 9 Monitor Wells	
Sub-Basin: L	
PCW/LOG Due Date: 05/31/2013	

2. WELL(S) Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84)

☐ NM State Plane (NAD83) (Feet)
☐ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

☒ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known):	X or Easting or Latitude:	Y or Northing or Longitude:	Optional: Complete boxes labeled "Other" below with PLSS (Public Land Survey System, i.e. Quarters, Section, Township, Range); Hydrographic Survey Map & Tract; Lot, Block & Subdivision; OR Land Grant Name if known.
MW-07	**32° 36' 27.7"**	**-103° 18' 38.8"**	SW1/4 NE1/4 NW1/4 Sec 1, Twp 20S, Rge 36E
MW-08	**32° 36' 25.7"**	**-103° 18' 51.5"**	SW1/4 NW1/4 NW1/4 Sec 1, Twp 20S, Rge 36E
MW-09	**32° 36' 23.1"**	**-103° 18' 49.4"**	SE1/4 NW1/4 NW1/4 Sec 1, Twp 20S, Rge 36E
MW-10	**32° 36' 23.2"**	**-103° 18' 42.4"**	SW1/4 NE1/4 NW1/4 Sec 1, Twp 20S, Rge 36E
MW-11	**32° 36' 24.2"**	**-103° 18' 37.5"**	SW1/4 NE1/4 NW1/4 Sec 1, Twp 20S, Rge 36E

STATE ENGINEER OFFICE ROSWELL NEW MEXICO 2012 MAY 1 P 2:42

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☒ **Yes** ☐ **No** **If yes, how many** 4

Other description relating well to common landmarks, streets, or other: **NA**

Well is on land owned by: **Enersource And New Mexico State Land Office**

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☐ **Yes** ☒ **No**
If yes, how many_____

Approximate depth of well (feet): **50.00**	Outside diameter of well casing (inches): **4.00**
Driller Name: **New Mexico Licensed Driller**	Driller License Number: **TBD**

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

A maximum of nine monitoring wells are prposed to be installed for the purpose of monitoring groundwater quality at and near a former refinary. The locations stated are approximate and may change slightly depending on findings of the investigation. Fewer wells may be installed if contamination is found to be less than predicted. INTERA Incorporated is under contract with the New Mexico Energy, Minerals, and Natural Resources Department, Oil Conservation Division, who is regulating the site and providing funding for the investigation.

FOR OSE INTERNAL USE — Application for Permit, Form wr-07

File Number: L-12993	Trn Number: 503093

NEW MEXICO OFFICE OF THE STATE ENGINEER

ATTACHMENT 1
POINT OF DIVERSION DESCRIPTIONS

This Attachment is to be completed if more than one (1) point of diversion is described on an Application or Declaration.

a. Is this a: ☐ Move-From Point of Diversion(s) ☐ Move-To Point of Diversion(s)	**b. Information on Attachment(s):** Number of points of diversion involved in the application: _____ Total number of pages attached to the application: _____

☐ **Surface Point of Diversion** **OR** ☒ **Well**

Name of ditch, acequia, or spring:	
Stream or water course:	
Tributary of:	

c. Location (Required):
Required: Move to POD location coordinate must be either New Mexico State Plane (NAD 83), UTM (NAD 83), **or** Lat/Long (WGS84)

NM State Plane (NAD83) (feet) NM West Zone ☐ NM Central Zone ☐ NM East Zone ☐	UTM (NAD83) (meters) Zone 13N ☐ Zone 12N ☐	☒ Lat/Long–(WGS84) 1/10th of second	OTHER (allowable only for move-from descriptions - see application form for format) ☐ PLSS (quarters, section, township, range) ☐ Hydrographic Survey, Map & Tract ☐ Lot, Block & Subdivision ☐ Grant
POD Number: **MW-12**	X or Longitude **32° 36' 27.4"** Y or Latitude **-103° 18' 36.4"**		Other Location Description: SW1/4 NE1/4 NW1/4 Sec 1, Twp 20S, Rge 36E
POD Number: **MW-13**	X or Longitude **32° 36' 20.2"** Y or Latitude **-103° 18' 47.7"**		Other Location Description: NE1/4 SW1/4 NW1/4 Sec 1, Twp 20S, Rge 36E
POD Number: **MW-14**	X or Longitude **32° 36' 20.3"** Y or Latitude **-103° 18' 41.2"**		Other Location Description: NW1/4 SE1/4 NW1/4 Sec 1, Twp 20S, Rge 36E
POD Number: **MW-15**	X or Longitude **32° 36' 20.4"** Y or Latitude **-103° 18' 36.7"**		Other Location Description: NW1/4 SE1/4 NW1/4 Sec 1, Twp 20S, Rge 36E
POD Number:	X or Longitude Y or Latitude		Other Location Description:
POD Number:	X or Longitude Y or Latitude		Other Location Description:
POD Number:	X or Longitude Y or Latitude		Other Location Description:
POD Number:	X or Longitude Y or Latitude		Other Location Description:
POD Number:	X or Longitude Y or Latitude		Other Location Description:

STATE ENGINEER OFFICE ROSWELL, NEW MEXICO 2012 MAY -1 P 2:

FOR OSE INTERNAL USE

Form wr-08
POD DESCRIPTIONS - ATTACHMENT 1

File Number: L-12993	Trn Number: 503093
Trans Description (optional): 9 Monitor Wells	

4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory:	**Pollution Control and/or Recovery:**	**Construction De-Watering:**	**Mine De-Watering:**
☐ Include a description of any proposed pump test, if applicable.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge.	☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ☒ Include the reason for the monitoring well, and, ☒ The duration of the planned monitoring.	☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	**Geo-Thermal:** ☐ Include a description of the geothermal heat exchange project, ☐ The amount of water to be diverted and re-injected for the project, ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), JAMI BAILEY
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Applicant Signature

Applicant Signature

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO
2012 MAY -1 P 2:42

ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 2nd day of May 20 12, for the State Engineer,

Scott A. Verhines, P.E., State Engineer

By: Andy Morley
Signature

Print

Title: Andy Morley, Acting District II Manager
Print

FOR OSE INTERNAL USE

Application for Permit, Form wr-07

File Number: L-12993	Trn Number: 503093

Ray Powell, M.S., D.V.M.
COMMISSIONER

State of New Mexico
Commissioner of Public Lands
310 OLD SANTA FE TRAIL
P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

COMMISSIONER'S OFFICE
Phone (505) 827-5760
Fax (505) 827-5766
www.nmstatelands.org

May 3, 2012

NM Energy, Minerals and Resources Department Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Attn: Jim Griswold

Re: Confirmation of Verbal Approval – WM-244

Dear Mr. Griswold,

This letter is to document in our files, that you have requested expedited and/or emergency approval to begin construction of the project applied for under Application for Water Easement, WM-244. Verbal request has been granted and approved effective today, May 3, 2012.

We wish to inform you, for next time that verbal approval is not normally granted. Verbal approvals are granted only if the applicant can demonstrate an emergency situation. It is the responsibility of the applicant to submit the Application for Water Easement with sufficient time to allow for delays in the processing cycle.

If we can be of further assistance to you, please do not hesitate to contact me at (505) 827-5899 or at pgarcia@slo.state.nm.us.

Sincerely,

Philip Garcia, Management Analyst
Surface Resource Division
Right-of-Way Section

INTERA Incorporated
6000 Uptown Blvd, NE
Suite 220
Albuquerque, NM 87110
Telephone: (505) 246-1600
Fax: (505) 246-2600

August 16, 2012

Mr. Jim Griswold, Hydrologist
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: Soil Vapor Extraction System Design Work Plan, Former Enersource Facility, Monument, Lea County, New Mexico

Dear Mr. Griswold,

INTERA has prepared the enclosed scope of work and cost estimate for the above-referenced project. Please do not hesitate to contact me at (505) 246-1600 if you have any questions or require further information.

Sincerely,
INTERA Incorporated

Joe A. Galemore
Senior Project Manager

Enclosure

FILE: NMGSD.M002.ENER

SOIL VAPOR EXTRACTION SYSTEM DESIGN WORK PLAN

Former Enersource Facility
Monument, Lea County, New Mexico

Submitted to:

New Mexico Energy, Minerals, and Natural Resources Department
New Mexico Oil Conservation Division

Submitted by:

Geosciences & Engineering

6000 Uptown Boulevard NE, Suite 220
Albuquerque, New Mexico 87110

August 16, 2012

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1.0 INTRODUCTION

This Work Plan describes the plan for the design of a Soil Vapor Extraction (SVE) system at the former Enersource facility (Site) and adjacent properties located in the northwest quarter of Section 1, Township 20 South, Range 36 East, in Lea County, New Mexico, within the High Plains section of the Great Plains physiographic province. (Figure 1, Site Location Map). This Work Plan was prepared in response to a request from Mr. Jim Griswold of the New Mexico Energy, Minerals, and Natural Resources Department, Oil Conservation Division (OCD), to Mr. Joe Galemore of INTERA Incorporated (INTERA) on July 12, 2012 (personal communication, Griswold, 2012).

Historical operations at the Site include use as an oil refinery and, under Enersource operations, as a crude oil reclamation facility. Results of several investigations completed since 2006 indicate that contamination related to hydrocarbon storage and processing has impacted soil and groundwater at the Site and adjacent properties. Most recently, an investigation to further delineate the limits of dissolved-phased petroleum (specifically benzene) and light non-aqueous phase liquid (LNAPL) contamination was performed. Field activities for this investigation were conducted between May 8 and May 28, 2012(INTERA, 2012). A summary of this investigation and INTERA's recommendations are provided below. Summaries of previous investigation are provided in the 2012 Investigation Report (INTERA, 2012).

In general, three stratigraphic units were encountered in the 51 feet (ft) of subsurface penetrated during installation of the 2012 borings:

- Unit 1: Sand with variable amounts of silt and clay.
- Unit 2: Silty, fine-grained sand with discontinuous layers of caliche and clay.
- Unit 3: Interbedded clay and sand with variable amounts of clay.

The water table was observed in units 2 and 3 between approximately 35 feet bgs and 40 feet bgs. Groundwater is estimated to flow to the southeast with a gradient of 0.005 ft/ft.

Mobile LNAPL is present in the southeastern portion of the Site (Figure 2). The eastern boundary of the LNAPL plume is uncertain, but the western and southern boundaries have been delineated with some degree of certainty. Having said this, however, given the long period of time that elapsed before LNAPL appeared in MW-02 and the high dissolved-phase concentrations of benzene that exist to the west and south, the western and southern boundaries may change with time as more data are collected from nearby monitoring wells. The nature of

the LNAPL needs to be determined and the potential for a source located east of the Enersource facility must be investigated.

The extent of groundwater contamination appears to be, for the most part, defined to the north, northwest, and northeast, and possibly to the southwest, but has not been defined in other directions. The presence of benzene at concentrations exceeding 1,000 micrograms per liter (µg/L) in MW-09, MW-12, and MW-14 suggests that LNAPL is present nearby. The extent of contamination from 1,2-dichloroethane (EDC), a highly mobile chemical, is undefined to the southeast, and the highest concentration of EDC measured to date is in the farthest downgradient well. Based on the results of the investigation, the installation of additional monitoring wells to delineate the downgradient extent of dissolved-phase contamination and periodic groundwater monitoring was recommended.

The analysis of the LNAPL baildown/recovery test using the U.S. Environmental Protection Agency (EPA) method indicated that the average recovery rate to 80% recovery is 1.02 gallons/day. This recovery rate suggests that LNAPL recovery by skimming is not a viable remediation option. The analysis of the baildown/recovery test using the Bouwer-Rice method results in an LNAPL transmissivity of 0.70 ft^2/day. LNAPL transmissivities are a good performance metric. It is reported that if LNAPL transmissivities are below 0.8 ft^2/day, then a pneumatic or hydraulic LNAPL recovery system is no longer an effective remediation technology (ITRC, 2009).

Based on the results of the baildown/recovery test, INTERA recommended that an SVE system be implemented to remove LNAPL at the Site and adjoining properties. Our proposed scope of work for the design of an SVE system is provided below.

2.0 SCOPE OF WORK

The design process will consist of seven tasks. Each task is described in detail below.

2.1 Task 1: Planning and Permitting

Task 1 will consist of identifying the relevant permits and regulatory agency notifications that are required to construct and operate an SVE system. We anticipate that the following will be required:

- New Mexico Office of the State Engineer well permits
- Notice of Intent to the NMED Air Quality Bureau

- Building/construction permits from local authorities (Note: An electrical Professional Engineer may need to be subcontracted for this permit.)
- Schedule and cost estimate

2.2 Task 2: Well Field

Task 2 will consist of the design of the SVE well field. Due to extensive Site investigations performed by INTERA, a pilot test will not be performed at the Site. The treatment boundary is restricted to the LNAPL plume as depicted in Figure 2, including the interpolated extent on the eastern boundary. Soil characteristics identified during previous Site investigations and experience at other sites will be utilized to estimate the following design parameters and well specifications:

- SVE well radius of influence (ROI)
- Number of wells and their locations
- SVE well screened interval
- SVE well diameter
- SVE well surface completion detail

Task 2 will also include the development of a schedule and cost estimate.

2.3 Task 3: Underground Piping System

Task 3 will consist of completing the design for the trenching and underground piping. We envision that the SVE well field will be grouped into circuits. The design will include a plan for the locations of trenches and the details of the conveyance piping system necessary to provide operational flexibility. That is, the design will provide details that allow operation of individual wells, individual SVE well circuits, or any combination of SVE well circuits. Specific elements of the system that will be designed in this task include:

- Conveyance piping specifications
  - Type
  - Length
  - Friction Head loss
  - Diameter
- Trench locations

- Trench depth, width, and backfill compaction specifications
- Excavated soil disposition
- Construction schedule and cost estimate

2.4 Task 4: Above-Ground System

The above ground components of the SVE system will be designed in Task 4. The design will be based on estimated soil vapor flow rates, contaminant concentrations in vapor, and regulatory agency requirements. Nuisance mitigation measures will also be considered. The above ground system components that will be specified include the following:

- SVE Blower/Oxidizer type and capacity
- Equipment compound size and construction
- Manifold piping
  - Type
    - PVC
    - Steel
    - HDPE
  - Length
    - Fittings – head loss
  - Diameter
  - Instrumentation, Control Valves, and sample port locations
- Soil moisture condensate management
- Power source
- Supplemental fuel source
- Instrumentation/control system
- Construction schedule and cost estimate

Rental or purchase of high cost items such as the blower/oxidizer will be evaluated in this task.

2.5 Task 5: Operation, Maintenance, and Performance Monitoring

A System Operation, Maintenance, and Monitoring Plan will be developed in Task 5 for both start-up and long-term SVE system operation to ensure effective Site remediation and compliance with regulatory requirements. Temperature, pressure/vacuum, flow rate, and contaminant concentration in soil vapor will need to be monitored frequently. The following design elements will be evaluated and developed as part of Task 5:

- Control system specifications
- Monitoring equipment specifications
  - Pressure gauges
  - Sample ports
  - Data logger
- Sampling and analysis plan
  - Sample frequency
  - Testing parameters
    - Field analysis
    - Laboratory analysis
- Utility costs

2.6 Tasks 6 and 7: Deliverables

INTERA will prepare a design package that includes the following:

- Task 6: Drawing Package
  - Cover sheet
  - Site plan
  - Well detail
  - Underground piping layout
  - Trench detail
  - Valving and instrumentation specifications
  - Equipment specifications
    - Power source

  - Condensate separator
  - Vapor treatment system
  - Vapor extraction blower
  - Pump
  - Control system

- Task 7: Summary and Cost Estimate
  - Report
    - Design narrative
    - Calculation sets
  - Project schedule
  - Cost estimate
    - Direct labor
    - Permit fees
      - Well permits
    - Discharge permits (air)
    - Utility and construction permits
    - Sub-contractor quotes
      - General contractor quotes
      - Power source (utility costs)
      - Vapor extraction blower and oxidizer unit
    - Expenses

3.0 PERSONNEL

The key personnel who will be responsible for completion of the project are listed below, along with their areas of responsibility.

Mr. Joe Galemore, PG, Project Manager – Mr. Galemore will serve as the project manager with responsibility for the execution of the project and will be the primary point of contact with the OCD.

Mr. Larry Coons, PE, Principal Engineer – Mr. Coons will serve as the technical lead and will be responsible for approving designs and drawings. He will direct the engineering staff as required.

Mr. Jim Joseph, PE, Project Engineer – Mr. Joseph will provide technical support as needed.

Ms. Amy Andrews, PE, Project Engineer – Ms. Andrews will provide technical support and assist with the drawing package as needed.

Ms. Ashley Arrossa, Staff Engineer – Ms. Arrossa and/or other INTERA engineering staff and scientists will design the SVE System under the guidance of the technical staff.

4.0 SCHEDULE

INTERA will begin scheduling and project coordination activities as soon as possible upon receipt of authorization to proceed from the OCD. The work is estimated to be completed in one month, including report preparation.

5.0 COST

A full cost estimate including labor, other direct costs, and other supporting services, is provided in Appendix A.

6.0 REFERENCES

Griswold, J., 2012. Personal Communication between Mr. Jim Griswold of the New Mexico Energy, Minerals, and Natural Resources Department, Oil Conservation Division, and Mr. Joe Galemore of INTERA Incorporated (INTERA). July 12.

INTERA, 2007. "Phase I and II Remediation, Former Enersource Facility, Monument, Lea County, New Mexico." Prepared for New Mexico Energy, Minerals and Natural Resources Department, New Mexico Oil Conservation Division. June 29, 2007.

———. 2009. "Remedial Investigation and Removal Action Report, Former Enersource Facility, Monument, Lea County, New Mexico." Prepared for New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division. December 4, 2009.

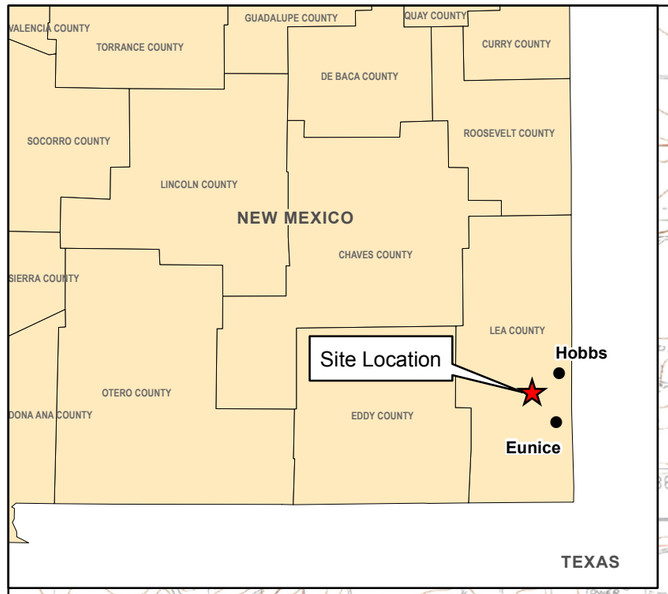
———. 2011. "January 2011 Groundwater Monitoring Report, Former Enersource Facility, Monument, Lea County, New Mexico. Prepared for New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division." March 9, 2011.

———. 2012. "2012 Site Investigation Report, Former Enersource Facility. Monument, Lea County, New Mexico. Prepared for New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division." June 29, 2012.

ITRC, 2009. "Evaluating LNAPL Remedial Technologies for Achieving Project Goals." Prepared by The Interstate Technology & Regulatory Council LNAPLs Team. December 2009.

U.S. Environmental Protection Agency (EPA), 2012. "Chapter II Soil Vapor Extraction," *in* How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites: A Guide for Corrective Action Plan Reviewers. October 1994. http://www.epa.gov/swerust1/pubs/tum_ch2.pdf. Accessed August 5, 2012.

FIGURES



Estimated Area Containing >10,000 mg/L of Chloride in Groundwater (Rice, 2011)

Versado Gas Processing Plant

El Paso Natural Gas Facility

Rice EME C-1 EOL Chloride Release

Monument

Monument

28 Well

N

S

0 1,000 2,000 4,000

Feet

USGS 7.5 Minute Topographic Map:
Monument North Quadrangle,
1985, Contour Interval 10 Feet;
Monument South Quadrangle,
1985, Contour Interval 5 Feet;
Hobbs West and Hobbs SW Quadrangles,
1969/revised 1979, Contour Interval 5 Feet
Site Location: NW¼ Sec. 1; T20S; R36E

Legend

- Property Boundary

WATERS Database Well Locations

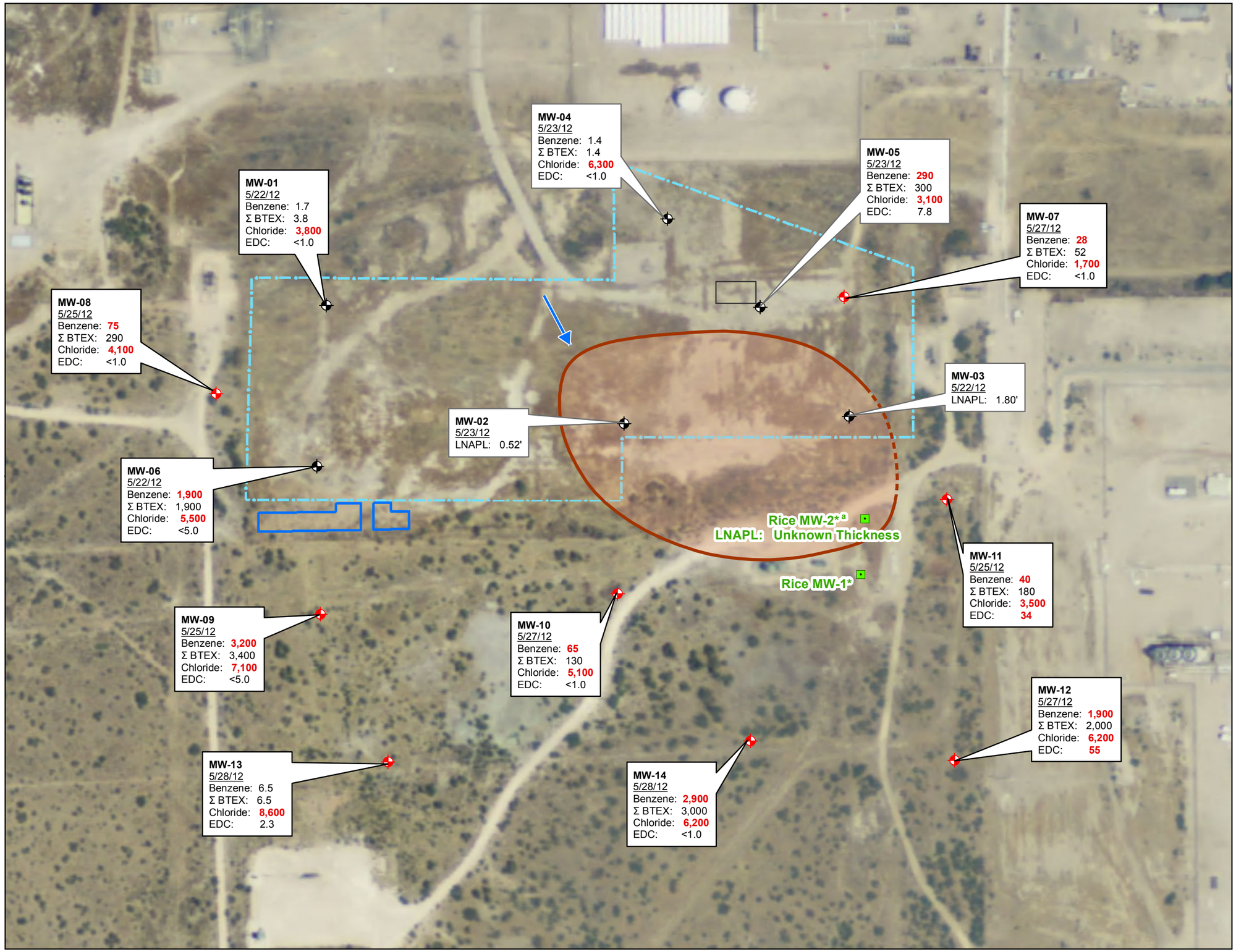
- DOM - Domestic
- PRO - Prospecting/Dev. of Natural Resources
- EXP - Exploration
- MUL - Multiple Domestic
- POL - Pollution Control
- STK - Livestock Watering
- IRR - Irrigation
- SAN - Sanitary

EstimatedClinGWFigure1

Source(s):
Wells – WATERS database, 2011;
Topos – MapTech/USGS.

Figure 1
Site Location Map
Former Enersource Facility
Monument, NM

Path: S:\Projects\OCD - Enersource Facility\graphics\Monument NM\GIS\Additional_Site_Charac\Fig01_LocationMap.mxd



N
S

0 80 160 320
Feet

Legend

- 2009 Monitoring Well Location
- 2012 Monitoring Well Location
- Monitoring Well Installed by Others
- Estimated Groundwater Flow Direction, May 2012
- Property Boundary
- Excavation Area
- Estimated Areal Extent of LNAPL
- (Dashed where Inferred)

Sample Location
Sample Date
Analyte: Result

Notes:
1. Results are in µg/L except Chloride (mg/L)
2. **Bold** indicates concentration above NMWQCC Standard
3. Σ BTEX = Sum of Benzene, Toulene, Ethyl benzene, and total Xylenes concentrations

* = Estimated locations based on field reconnaissance.

[a] = Presence of LNAPL is based on verbal information from OCD

Source(s): 2011 aerial photo – EDAC;
Property boundary/monitoring wells – John West Surveying Co., Hobbs, NM.

Figure 2
Distribution of Contaminants in Groundwater, May 2012
Former Enersource Facility
Monument, NM

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APPENDIX A

Cost Estimate

APPENDIX A
Cost Estimate for SVE System Design Work Plan
Former Enersource Facility
Monument, Lea County, New Mexico
August 16, 2012

Labor			Task 1 Project Planning/Permitting		Task 2 Well Field Design		Task 3 Underground System Layout Design		Task 4 Above Ground System Layout Design		Task 5 Operation and Maintenance, and Monitoring Planning		Task 6 Drawing Set		Task 7 Report		Total: Task 1-7 Project Total	
	Rate	Units	Units	Price	Units	Price	Units	Price	Units	Price	Units	Price	Units	Price	Units	Price	Units	Price
Principal Scientist (PM) Joe Galemore	$150	Hours	8	$1,200.00	8	$1,200.00	4	$600.00	4	$600.00	4	$600.00		$0.00		$0.00	28	$4,200.00
Principal Engneer Larry Coons (PE)	$150	Hours	0	$0.00	4	$600.00	4	$600.00	8	$1,200.00	4	$600.00	16	$2,400.00	12	$1,800.00	48	$7,200.00
Project Engineer/Scientist	$85	Hours	4	$340.00	4	$340.00		$0.00		$0.00		$0.00	8	$680.00		$0.00	16	$1,360.00
Staff Engineer/Scientist Ashley Arrossa	$79	Hours	8	$632.00	32	$2,528.00	20	$1,580.00	20	$1,580.00	20	$1,580.00	40	$3,160.00	20	$1,580.00	160	$12,640.00
Technician	$75	Hours	0	$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00	0	$0.00
Draftsperson	$69	Hours	0	$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00	0	$0.00
Administrator	$75	Hours	2	$150.00		$0.00		$0.00		$0.00		$0.00		$0.00	8	$600.00	10	$750.00
Clerk	$58	Hours	2	$116.00		$0.00		$0.00		$0.00		$0.00		$0.00	4	$232.00	6	$348.00
Labor Subtotal				**$2,438.00**		**$4,668.00**		**$2,780.00**		**$3,380.00**		**$2,780.00**		**$6,240.00**		**$4,212.00**		**$26,498.00**
Subcontractors/Permit Fees																		
Electrical Engineer (PE)	$5,000.00	Lump Sum	1	$5,000.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00	1	$5,000.00
AutoCADD Technician	$69	Hour		$0.00		$0.00		$0.00		$0.00		$0.00	40	$2,760.00		$0.00	40	$2,760.00
Fee	0%	%	$5,000.00	$0.00	$0.00	$0.00		$0.00		$0.00		$0.00		$0.00		$0.00	5000	$0.00
Subcontractor Subtotal				**$5,000.00**		**$0.00**		**$0.00**		**$0.00**		**$0.00**		**$2,760.00**		**$0.00**		**$7,760.00**

Subtotal	**$34,258.00**
NM GR Tax	**$2,398.06**
Project Total	**$36,656.06**

State of New Mexico
Purchase Order

PO Number to be on all Invoices and Correspondence

Dispatch via Print

Purchase Order	Date	Revision	Page
52100-0000037435	08/22/2012		1
Payment Terms	**Freight Terms**		**Ship Via**
Pay Now	FOB Destination		Best Way
Buyer	**Phone**		
RACHEL D. HERRERA	505/476-3311		

Energy, Minerals & Resources
1220 South St. Francis Drive
Santa Fe NM 87505
United States

Vendor: 0000043982
INTERA INC
1812 CENTRE CREEK DR STE 300
AUSTIN TX 78754

Ship To: 1220 South St. Francis Drive
Room 346
Santa Fe NM 87501
United States

Bill To: 1220 South St. Francis Drive
Room 346
Santa Fe NM 87501
United States

Origin: **ENC** **Exc\Excl #:**

Line-Sch	Item/Description	Mfg ID	Quantity UOM	PO Price	Extended Amt	Due Date
1- 1	Design of soil vapor extraction system for soil remediation at Former Enersource Refinery (RECR-5)		1.00 EA	38,500.00	38,500.00	08/22/2012
	52100-31100-0710000000-535300- -0750- - -113-20000					

Schedule Total 38,500.00

Item Total 38,500.00

Price Agreement is not set up in SHARE - Price Agreement has been extended to August 15, 2013.
10-805-00-07208

Total PO Amount 38,500.00

Agency Approval - I certify that the proposed purchase represented by this document is authorized by and is made in accordance with all State (and if applicable Federal) legislation rules and regulation. I further certify that adequate unencumbered cash and budget expenditure authority exists for this proposed purchase and all other outstanding purchase commitments and accounts payable.

Authorized Signature

John H Bemis

STATE OF NEW MEXICO SPD-101A (07/92)
GENERAL SERVICES DEPARTMENT- PURCHASING DIVISION
TERMS AND CONDITIONS UNLESS OTHERWISE SPECIFIED

1. GENERAL: When the State Purchasing Agent issues a purchase document in response to the Vendors bid, a binding contract is created.
2. VARIATION IN QUANTITY: No variation in the quantity of any item called for by this order will be accepted unless such variation has been caused by conditions of loading, shipping, packing or allowances in manufacturing process, and then only to the extent, if any, specified elsewhere in this order.
3. ASSIGNMENT:
   A: Neither the order, nor any interest therein, nor claim thereunder, shall be assigned or transferred by the Vendor, except as set forth in subparagraph 3B below or as expressly authorized in writing by the STATE PURCHASASING AGENTS OFFICE. No such assignment or transfer shall relieve the Vendor from the obligations and liabilities under this order.
   B: Vendor agrees that any and all claims for overcharge resulting from antitrust violations which are borne by the State as to goods, services, and materials purchased in connection with this bid are hereby assigned to the State.
4. STATE FURNISHED PROPERTY: State furnished property shall be returned to the state upon request in the same condition as received except for ordinary wear, tear, and modifications ordered hereunder.
5. DISCOUNTS: Prompt payment discounts will not be considered in computing the low bid. Discounts for payment within 20 days will be considered after the award of the contract. Discounted time will be computed from the date of receipt of the merchandise or invoice, whichever is later.
6. INSPECTION: Final inspection and acceptance will be made at the destination. Supplies rejected at the destination for non-conformance with specifications shall be removed, at the Vendors risk and expense, promptly after notice of rejection.
7. INSPECTION OF PLANT: The State Purchasing Agent may inspect, at any reasonable time, the part of the contractors, or any subcontractors plant or place of business, which is related to the performance of this contract.
8. COMMERCIAL WARARANTY: The Vendor agrees that the supplies or services furnished under this order shall be covered by the most favorable commercial warranties the Vendor gives to any customer for such supplies or services, and that the rights and remedies provided herein shall extend to the State and are in addition to and do not limit any rights afforded to the State by any other cause of this order. Vendor agrees not to disclaim warranties of fitness for a particular purpose or merchantability.
9. TAXES: The unit price shall exclude all State taxes.
10. PACKING, SHIPPING AND INVOICING:
    A: The States purchase document number and the Vendors name, users name and location shall be shown on each packing and delivery ticket, package, bill of lading and other correspondence in connection with the shipment. The users count will be accepted by the Vendor as final and conclusive on all shipments not accompanied by a packing ticket.
    B: The Vendors invoice shall be submitted in triplicate, duly certified and shall contain the following information: order number, description of supplies or services, quantities, unit prices and extended totals. Separate invoices shall be rendered for each and every complete shipment.
    C: Invoices must be submitted to the using agency and NOT THE STATE PURCHASING AGENT.
11. DEFAULT: The State reserves the right to cancel all or any part of this order without cost to the State, if the Vendor fails to meet the provisions of this order and, except as otherwise provided herein, to hold the Vendor liable for any excess cost occasioned by the State due to the Vendors default. The Vendor shall not be liable for any excess costs if failure to perform the order arises out of causes beyond the control and without the fault or negligence of the Vendor, such causes include, but are not restricted to, acts of God or of the public enemy, acts of the State or of the Federal Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargos, unusually severe weather and defaults of subcontractors due to any of the above, unless the State shall determine that the supplies or services to be furnished by the subcontractor where obtainable from other sources in sufficient time to permit the Vendor to meet the required delivery scheduled. The rights and remedies of the State provided in this paragraph shall not be exclusive and are in addition to any other rights now being provided by law or under this order.
12. NON-COLLUSION: In signing this bid, the Vendor certifies he/she has not, either directly or indirectly, entered into action in restraint of free competitive bidding in connection with this proposal submitted to the State Purchasing Agent.
13. NON-DISCRIMINATION: Vendors doing business with the State of New Mexico must be in compliance with the Federal Civil Rights Act of 1964 and Title VII of that Act, Rev., 1979.
14. THE PROCUREMENT CODE: Sections 13-1-28 through 13-1-199 NMSA 1978 imposes civil and criminal penalties for its violation. In addition, the New Mexico criminal statutes impose felony penalties for bribes, gratuities and kickbacks.
15. All bid items are to be NEW and most current production, unless otherwise specified.
16. PAYMENT FOR PURCHASES: Except as otherwise agreed to: late payment charges may be assessed against the user state agency in the amount and under the conditions set forth in section 13-14158 NMSA 1978.
17. WORKERS COMPENSATION: The Contractor agrees to comply with state laws and rules pertaining to workers compensation benefits for its employees. If the Contractor fails to comply with Workers Compensation Act and applicable rules when required to do so, this (Agreement) may be terminated by the contracting agency.
18. PAY EQUITY RECORDING: The Contractor agrees to comply with New Mexico Pay Equity reporting requirements as detailed in Executive Order 2009-049 Implementation Guidance available at http://www.generalservices.state.nm.us/spd/guidance.pdf