

RECEIVED

JUL 07 2011

NMOCD ARTESIA

June 28, 2011

Subject:

Mr. Mike Bratcher
NMOCD District 2
1301 West Grand Avenue
Artesia, NM 88210

AMARILLO 92I North Bivins Amarillo. Texas 79107 Phone 806.467.0607 Fax 806.467.0622

ARTESIA

408 West Texas Ave. Artesia, New Mexico 88210 Phone 575.746.8768 Fax 575.746.8905

AUSTIN

9II West Anderson Lane Suite 202 Austin, Texas 78757 Phone 5I2 989.3428 Fax 5I2.989 3487

HOBBS

318 East Taylor Street Hobbs, New Mexico 88240 Phone 575.393.4261 Fax 575.393.4658

MIDLAND

2901 State Hwy 349 Midland, Texas 79706 Phone 432.522.2133 Fax 432.522.2180

SAN ANTONIO

II Commercial Place Schertz, Texas 78I54 Phone 2IO.265.8025 Fax 2IO 568.2I9I

TULSA 525 South Main Street Suite 535 Tulsa, Oklahoma 74l03 Phone 918.742.087l Fax 918.382.0232

ENVIRONMENTAL CONSULTING

ENGINEERING
DRILLING
CONSTRUCTION
SPILL MANAGEMENT
GENERAL CONTRACTING

Soil Assessment and Remediation Work Plan

Quantum Resources Management, LLC

Conoco 7 State No. 12

API # 30-015-25160 - 2RP-601

Dear Mr. Bratcher,

Quantum Resources Management, LLC has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the referenced Conoco 7 State No. 12 release. The results of our soil assessment and proposed remediation activities consist of the following:

Incident Date

January 21, 2011

Background Information

The Conoco 7 State No. 12 is located approximately twenty-five (25) miles east of Artesia, New Mexico. The legal location for the site is Section 7, Township 19 South and Range 29 East in Eddy County, New Mexico. More Specifically the latitude and longitude for the release are 32.67308 North and -104.11502 West.

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soil in this area is made up of Reeves-Gypsum land complex soils with 0 to 3 percent slopes. The local surface and shallow geology, Quaternary Age sedimentary deposits, is comprised of alluvium and eolian sands which includes silty soils under lain by gypsum and hard caliches. Drainage courses in this area are normally dry. The New Mexico State Engineer web site indicates the nearest ground water data to be in S7-T19S-R29E. The ground water in Section 7 is reported to be 150' below ground surface (bgs). The referenced groundwater data is presented in Appendix I.

The ranking for this site is 0 based on the as following:

Depth to ground water >100'
Wellhead Protection Area >1000'
Distance to surface water body >1000'

Toll Free: 866.742.0742 www.talonlpe.com

Incident Description

On January 21, 2011 a filter located on the injection line at the Conoco 7 State No. 12 was found to be leaking. The water injection well was taken out of service, the filter was replaced and the well was returned to service. Approximately twenty (20) barrels of produced water were released. There were no fluids recovered. The areas affected by this release were on the location south of the injection well and the closed drilling pit area located due south of the location. The release flowed across the location in two narrow flow paths, both measured to be approximately 2-foot wide by 100-feet long. The release pooled on the closed drilling pit encompassing an area approximately 65-feet long by 50-feet wide.

Actions Taken

On February 9, 2011 Talon/LPE mobilized personnel to begin the assessment and soil sampling for the construction of a work plan. Grab soil samples were collected utilizing a split spoon auger rig. The soil samples labeled S-1 were collected as background data from the non-impacted area located on the closed drilling pit. Refusal was encountered in the borehole S-1 at 26-feet below ground surface (bgs). The soil samples from boring S-2 were collected from the impacted area of the closed drilling pit. Refusal was encountered in this borehole at 22-feet bgs.

On April 29, 2011 Talon/LPE mobilized personnel again to the site for additional sampling on location. Refusal was encountered in the test trench S-3 at 12-feet bgs using a backhoe. This soil sample location was labeled S-3.

The soil samples were collected by Talon personnel wearing clean nitrile gloves. The soil samples were placed in laboratory provided sample containers and transported to Cardinal Laboratories in Hobbs, New Mexico for analysis of chlorides using Method SM4500CL-B. The complete laboratory report is attached as Appendix II.

Analytical Results

Analytical results received from Cardinal Laboratories are summarized below:

	S-1		S-2		S-3
Feet	Chlorides(mg/kg)	Feet	Chlorides(mg/kg)	Feet	Chlorides(mg/kg)
0'	22400	0'	19600	0'	36000
2'	6240	2′	16000	1'	3040
4'	4800	4'	11800	2'	1680
6'	6320	6'	8800	4'	1600
8'	2560	8'	4160	6'	2160
10'	2400	10'	4320	8'	2560
16'	2640	16'	4880	10'	48
26'	1040	22'	1420		

Summary and Conclusion

- Groundwater in the project vicinity is greater than 100-feet below land surface per the New Mexico State Engineer Database.
- Based upon the results of the laboratory data obtained for this investigation, the vertical impacts of the chloride release on the closed drilling pit area have been delineated to 1420 mg/kg at 22-feet bgs. The background chlorides in the closed drilling pit area range from 22400 mg/kg at 0-foot to 1040 mg/kg at 26-feet bgs.
- Based on the depth of groundwater and the chloride levels detected in the soil at the sample location, it is unlikely that the chloride impacts identified from this release will pose a threat to groundwater.

Proposed Remedial Actions

- Due to the presence of existing chlorides in the former drilling pit no excavation of soil will be undertaken on the closed drilling pit area.
- The impacted soil on location will be excavated to a depth of 4-foot deep. The excavated soil will be transported to a NMOCD approved solid waste disposal facility.
- Upon completion of excavation activities, a compacted 1-foot clay barrier or a 20 mil liner will be installed into the bottom of excavated area.
- The excavated area will be backfilled to grade using new material transported from a local borrow pit, contoured to match existing terrain and seeded using an approved seed mixture for the area.
- A final report will be provided to the NMOCD Artesia Office utilizing Form C-141.

If we can provide additional information or be of further assistance please contact our office at 575.746.8768.

Respectfully submitted,

mile slubbly lof

TALON/LPE

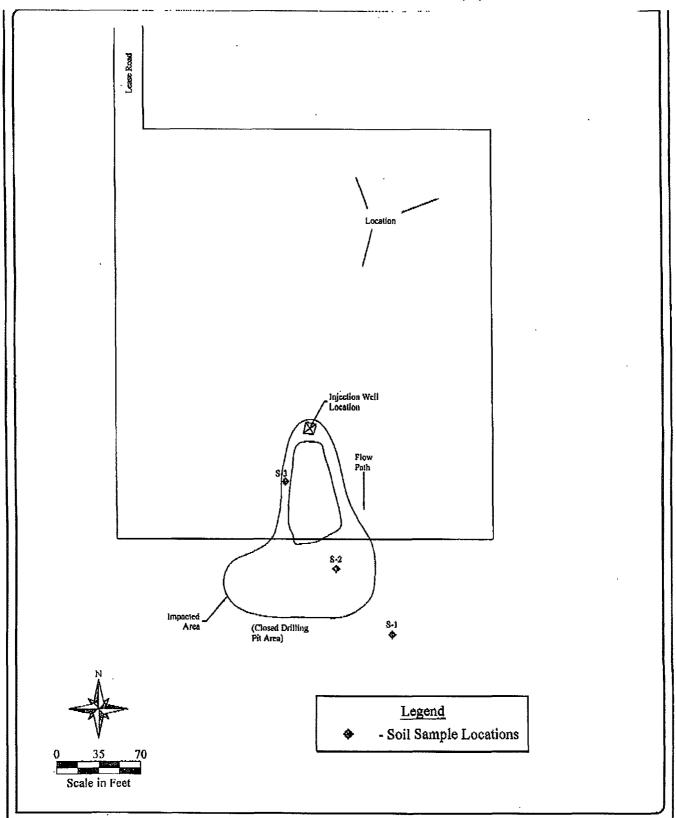
Mike Stubblefield

Project Manager

David J. Adkins

District Manager

SITE MAP





Date: 06/29/2011

Scale: 1"=70'

Drawn By: TJS

Conoco 7 State #12
Quantum Resources Management, LLC.
Eddy County, New Mexico
Figure 1 - Site Plan w/Soil Locations

APPENDIX I GROUNDWATER DATA INITIAL C-141



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)

hand to the second to the second district the second district to the second district to the second district to		(qua				smalle		argest)	(NAD8	3 UTM in m	eters)	(In feet)	
Su			, '	Q		*						•	-	Water
POD Number bas	sin Use	County	64	16	4	Sec	Tws	Rng	X	<u>Y</u>	Distance	Well	Water	Column
CP 00646	STK	ED	1	1	4	07	198	29E	583155	3615551	667	199	150	49
L 03348 APPRO	DOM	LE	4	3	4	35	18S	28E	580236	3618135*	3233	105	65	40
CP 00361	PRO	ED		1	3	09	198	28E	576195	3615347*	6455	365	265	100
CP 00361 EXPL	EXP	ED	3	1	3	09	198	28E	576094	3615246*	6566	365	265	100
RA 09588	DOM	ED		1	2	33	18S	28E	576976	3619384*	6606	300		
CP 00926	PRO	ED	4	1	1	01	208	28E	581074	3608090*	8013	300		
CP 00681	PRO	ED	1	1	3	34	198	29E	587230	3609127*	8235			
CP 00741	PRO	ED	1	3	2	34	198	29E	588030	3609533*	8394	230	60	170
CP 00830	STK	LE		2	1	04	20S	29E	586118	3608193*	8511	120		
CP 00820	STK	LE		2	4	13	198	29E	591713	3613870*	9326	120		
CP 00698	PRO	ED		3	1	03	20S	29E	587327	3607804*	9409			
CP 00502	STK	ED		1	1	18	198	28E	573001	3614478*	9733	100	91	9
CP 00836	DOM	ED		1	1	18	198	28E	573001	3614478*	9733	110		
CP 00837	DOM	ED		1	1	18	198	28E	573001	3614478*	9733	110		
CP 00838	DOM	ED		1	1	18	198	28E	573001	3614478*	9733			
										Avera	ge Depth to	Water:	149	feet
											Minimum	Depth:	60	feet
											Maximum	Depth:	265	feet
	•				•	- •		•			· · · ·		•	• • •

Record Count: 15

UTMNAD83 Radius Search (in meters):

Easting (X): 582622

Northing (Y): 3615953

Radius: 10000

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

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

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

Form C-141 Revised October 10, 2003

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

0-015-	15/60		Kele	ease Notific	atio	n and Co	orrective A	ctioi	1				
Kmw II	14138	073			249	874OPERA	ATOR		X Initi	ial Report		Final I	Repor
			ources Ma	anagement, LLC		Contact Gar	rett Newton						
Address 190	05 West S	ears Ave., A	rtesia, Ne	w Mexico 88210		Telephone l	No. 575-513-023	30					
Facility Nat	ne Conoce	o 7 State #12	2	<i>-</i>		Facility Typ	e WIW						
Surface Ow	ner State	 		Mineral O	wner :	State			Lease 1	No. B-8096			
						N OF REI	FASE		_ 				
Unit Letter	Section	Township	Range			/South Line	Feet from the	East/	West Line	County			
K	7	19S	29E	1880'	South		1980'	West		EDDY			
	1	1	Lati	tude <u>32.67308</u>		Longitud	e <u>104.11502</u>			1			
				NAT	URE	OF RELI	EASE						
Type of Relea	ase Produce	ed Waters					Release 20 bbls		Volume	Recovered -)-		
Source of Rel	lease Water	injection line	.				lour of Occurrence	е		Hour of Dise	covery		
Was Immedia	ta Notice (Giran?				01/21/2011 If YES, To			01/21/20	11 9:00am			
was minicula	ile iantice (Yes 🔲	No 🔲 Not Requ	uired		Nike Bratcher by v	oice m	ail box.				
By Whom? M	like Stubble	efield				Date and H	our 01/21/2011 1	:55pm					
Was a Watero		hed?	Yes X	No		If YES, Vo	lume Impacting th	he Wate	ercourse.				
70 117 .						1							
If a Watercou	rse was Im	pacted, Descn	ibe rully.	•									
Describe Caus	se of Proble	em and Remed	dial Action	ı Taken.*						RECI	=177	<u>=n</u>	7
m et 1				. 1. 1 277					1	MECI	=1 V		
A vacuum tru	ited on the i ick was bro	injection line ought to the lo	developed cation. No	a leak. The weather standing water wa	er was s recov	warm and dry vered.	at the time of the	release	•	FEB (1.7 20	011	
Describe Area										NMOCD	ART	ESIA	1
				vellhead, the releas I to be sixty (60') f						. 7			_
				i to be sixty (60°) i I utilizing a backho					•				
				on of a work plan i							·	•	
l hereby certif	y that the ir	nformation giv	ven above	is true and comple	te to th	ne best of my l	knowledge and un	derstan	d that purs	uant to NMC	CD ru	les and	
regulations all	operators a	are required to	report and	d/or file certain rele	ease no	otifications an	d perform correcti	ive acti	ons for rele	eases which r	nay end	danger	
public health o should their or	or the environe ha	onment. The a	acceptance demately:	e of a C-141 report investigate and ren	by the	NMOCD ma	rked as "Final Re	port" de	oes not reli	eve the opera	itor of l	iiability nan heal	lth
				ance of a C-141 re									
federal, state, o	or local law	s and/or regul	lations.										
		21	1 A	111			OIL CONS	<u>ERV</u>	<u>ATION</u>	<u>DIVISIO</u>	N		
Signature: Gar	rett Newton	Na	roth 1	2/1/2				g # /	<i>i</i>				1
Printed Name:	GARA	ett L.	U	when		Approved by [Di Signed By visor	11/4	K) KNA	mor_	•		
Fitle: Field Suj	pervisor				1	Approval Date	: 2/17/201	/ E	Expiration I	Date:			
E-mail Addres	e. aneudoni	@aytaetworks	e net			Conditions of A	Annount:						
2-man Addies	s. giicwioii	@pvuiciwoik.			\neg			Dulas	9 .	Attached			ļ
Date: 2/	3/201	/	Phone:	515-513-02	2		ation per OCD						
ttach Addition	onal Sheet	s If Necessa	гу				SUBMIT REMI			DOL	7 41	$\overline{\gamma}$	
		·&-			!	PROPOSAL	NOT LATER TH	INIV:		art	- OL	Ä	
						_3//4	12011			•			

APPENDIX II

Laboratory Data



February 15, 2011

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: CONOCO 7 STATE #12

Enclosed are the results of analyses for samples received by the laboratory on 02/11/11 16:45.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



TALON LPE
MIKE STUBBLEFIELD
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:

02/11/2011

Reported:

Chloride, SM4500CI-B

02/15/2011

Project Name:

CONOCO 7 STATE #12

Project Number:

701407.002.01

Project Location:

SEC. 7- 19S- 29E

mq/kg

Sampling Date:

oning Date.

02/09/2011

Sampling Type:

Soil

Sampling Condition: Sample Received By: ** (See Notes)

Jodi Henson

Sample ID: S - 1 0' (H100285-01)

	****3	75	711141720						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	22400	16.0	02/14/2011	ND	416	104	400	0.00	
Sample ID: S - 1 2' (H100	285-02)								
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6240	16.0	02/14/2011	ND	416	104	400	0.00	
Sample ID: S - 1 4' (H100	285-03)								
Chloride, SM4500CI-B	mg	/kg	Analyze	ed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4800	16.0	02/14/2011	ND	416	104	400	0.00	
Sample ID: S - 1 6' (H100	285-04)								
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6320	16.0	02/14/2011	ND	416	104	400	0.00	
Sample ID: S - 1 8' (H100	285-05)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2560	16.0	02/14/2011	ND	416	104	400	0.00	

Analyzed By: HM

Cardinal Laboratories

*=Accredited Analyte

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



TALON LPE MIKE STUBBLEFIELD 408 W. TEXAS AVE. ARTESIA NM, 88210

Fax To:

(575) 745-8905

Received:

02/11/2011 02/15/2011

Reported: Project Name:

CONOCO 7 STATE #12

Project Number:

701407.002.01

Project Location:

SEC. 7- 19S- 29E

Sampling Date:

02/09/2011

Sampling Type:

Soil

Sampling Condition:

** (See Notes)

Sample Received By:

Jodi Henson

Sample ID: S - 1 10' (H100285-06)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2400	16.0	02/14/2011	ND	416	104	400	0.00	
Sample ID: S - 1 16' (H100)	285-07)								
Chloride, SM4500Cl-B	mg,	/kg 	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2640	16.0	02/14/2011	ND	416	104	400	0.00	
Sample ID: S - 1 26' (H100)	285-08)							•	
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	02/14/2011	ND	416	104	400	10.9	
Sample ID: S - 2 0' (H10028	85-09)								
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19600	16.0	02/14/2011	ND	416	104	400	10.9	
Sample ID: S - 2 2' (H10028	85-10)								
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride 16000		16.0	02/14/2011	ND	416	104	400	10.9	

Cardinal Laboratories

*=Accredited Analyte

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



TALON LPE MIKE STUBBLEFIELD 408 W. TEXAS AVE. ARTESIA NM, 88210

Fax To:

(575) 745-8905

Received:

02/11/2011

Reported:

02/15/2011

Project Name: Project Number: CONOCO 7 STATE #12

Project Location:

701407.002.01 SEC. 7- 19S- 29E Sampling Date:

02/09/2011

Sampling Type:

Soil

Sampling Condition:

** (See Notes)

Sample Received By:

Jodi Henson

Sample ID: S - 2 4' (H100285-11)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11800	16.0	02/14/2011	ND ·	416	104	400	10.9	
Sample ID: S - 2 6' (H100)285-12)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8800	16.0	02/14/2011	ND	416	104	400	10.9	
Sample ID: S - 2 8' (H100	285-13)								•
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM				1	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4160	16.0	02/14/2011	ND	416	104	400	10.9	
Sample ID: S - 2 10' (H10	00285-14)								
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4320	16.0	02/14/2011	ND	416	104	400	10.9	
Sample ID: S - 2 16' (H10	0285-15)								
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4880	16.0	02/14/2011	ND	416	104	400	10.9	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE. Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed warved unless made in writing and received by Clert film (and the profit including). White any completion of the applicable service. In no event shall Cardinal be liable for inodental or consequential damages, including, without limitation, business interruptions, loss of profits incrured by client, subscilaries, affiliations or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



TALON LPE MIKE STUBBLEFIELD 408 W. TEXAS AVE. ARTESIA NM, 88210

Fax To:

(575) 745-8905

Received:

02/11/2011

Reported:

02/15/2011

Project Name:

CONOCO 7 STATE #12

Project Number: Project Location:

701407.002.01

SEC. 7- 19S- 29E

Sampling Date:

Sampling Type:

02/09/2011

Soil

Sampling Condition:

** (See Notes)

Sample Received By:

Jodi Henson

Sample ID: S - 2 22' (H100285-16)

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: HM			<u> </u>		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1420	16.0	02/14/2011	ND	416	104	400	10.9	

Cardinal Laboratories *=Accredited Analyte

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



Notes and Definitions

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Analyte NOT DETECTED at or above the reporting limit

ND

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses.

All claims, including those for negligence and any other cause whatsoever shall be deemed warved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by clernt, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476

	(505) 393-2326 FAX (505) 393-247	6																							1	. 2
Company Name							1		\$145 31 55	BI	LL	70	RONNIN	Ŕ					IANA	YSIS	RE	QUE	ST			
Project Manage	er: mike Stulblefield						7	P.O.	.#:					Т												
Address:	408 W. TCKAS AVC						7	Con	npan	y:						- 1	I			1			!			
City:	State: N/M	Zip	: 8	9 Z 10	······		7,	Attr	1:						1							!				
Phone#: ゞつ	6-441-2254 Fax #:							Add	ress	:						İ									1	
	01407.602.01 Project Owne	r: O	want	m R	2) . [300	40	City	/:							- 1	ı		•		!	1				
	Coporo 7 State #12						- 1	Stat			Zir):			ł	1]	'					
	n: see. 7 - 198 - 79e							-	ne #:	:				1								-		· ·	-	
Sampler Name:			•					Fax			_			1	1		l			1	'	1	1			
FOR LAB USE ONLY					MA	TRIX			PRES	ERV	L	SAMPL	NG.	1	اج	1	1				İ					
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	OTHER:		DATE	TIME		Total excerise											
HIDD285-1	5-1 0	۲			V] .		9/204	9:510		V											
2	8.1 2.	9			1					_	3/	19/2011	9:514							<u> </u>	1	ــــــ	<u> </u>	↓	<u> </u>	
3	S 1 4.	5	Ш		10	\sqcup		_		1_	2/	19/2201	9:170	4	4				<u> </u>	<u> </u>	—	↓	↓	↓	├	ļ
4	5.16	5		4	100	Ш		_		_	-	5/201								ļ	ـــــــ	ـــــ	↓	—		
5	2.18	G	\sqcup	4	1	Ш	1	_		\perp	2/	9/204	10:150	_						 	ــــ	↓	ـــــ	—	<u> </u>	
<u></u>	5.110	4		_	8	Ш	\dashv	_		Ļ	-		10:20 m		<u> </u>	-			ļ	 		 	 	╀	 	
	5-1 16.	۵.		- -	U	-	_	1		-			10:25 A		V							↓	—		├	_
9	2.156.	۾	\vdash	-	/		+	4		-	T-		11:29A						<u> </u>	 	┼	┼	┼	 	 	ļ
10	5.20°	8	\vdash	-	1/2	\vdash		4			1	9/70//	12:110	_	<u> </u>	-				 	┼		 	┼	 	
PLEASE NOTE: Liability an	od Damages Cardinal's hability and client's exclusive remedy for a	ny dali	n arisk	g whath	V based	in cor	ntract o	r tort.	shall be	limited	to th	6/70/1 s amount pa	12:46	t for the	<u>v </u>					٠	ــــــــــــــــــــــــــــــــــــــ		ــــــــــــــــــــــــــــــــــــــ	ــــــــــــــــــــــــــــــــــــــ	<u></u>	L
analyses; All claims Include service, in no event shall C officiales or successors erist	ng those for neglipence and any other cause whatsoever shall be a profinal be liable for incidental or consequental damages, including ng out of or related to the performance of services hereunder by C	semaet vortiw tentha	oviaw t szimil t nagen	d unless lon, bus less of y	made in ness int vhather	n walla Ierruati	g end r	ecelvi es of i	ed by Ca	ardinal :	within motio	30 days aft	er completion of client, its subs resons or other	of the s idiaries invise	applicabl s,			· · · · · · · · · · · · · · · · · · ·						····		- · · · · · · · · · · · · · · · · · · ·
Relinquished By): Date:	Re	ceiv	ed B	y:								Phone F	Resu	iit;	Yes		No		Phone	#:					

[†] Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



[|] Time: 45 | Coll | Checked By: | Coll | Checked By: | Cool | Intact | Cool | Intact | Coll | Cool |

RDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(505) 393-2326 FAX (505) 393-2476

Company Name	ompany Name: Talon/IPE								B	Z	LTO	物機器物					ANAL	YSIS	RE	QUE	<u> 3T</u>			
Project Manage							Ρ.	0. #	:													.	1	
Address:	408 W. TEKAS AVE						C.	omp	any:								ļ				1 1	.	.	
City:	Arterin State: No	Zip	: 80	92.0			A	tn:														. 1		
Phone #: メン	- 441-2250 Fax#:						A	ddre	ss:								1		'			ıÌ		
	01407.002.0 Project Owner	r:Q	vant	m Rei	. A	pa. 4	(dc	ty:											1				ı	
	Coroco 7 State \$12							ate:		Z	Zip:							1					İ	
	n: see. 7 - 198.29e						Р	none	#:								l	Ì	1					
Sampler Name:							F	3x #:							1	l	1							
FOR LAB USE ONLY					MAT	RIX		PR	ESER	V.	SAMPLI	NG	ي و		ŀ			1		Į.				
Lab I.D.	FOR I'VE CIC) OMP. ERS W.M.								ICE / COOL	OTHER:	DATE	TIME	Total Chlory											
HID0285-11	5.2 4'	5			r		SLUDGE				219/20H	1:55 P	V											
17	5.2 6	5			1						2/4/2011	7:06 P	1			<u> </u>								
13	<.Z 8 S	5	L		1		_ _	1	Ш			2:15 8	<u></u>				L							
	5.2 10	G	ــــ		10			1_		_		2:218	<u></u>	ļ	<u> </u>		<u> </u>	<u> </u>	ــــــ	<u> </u>	<u> </u>	<u> </u>		
	5.2 16	19	1_		1		_ _	1_		_	2/9/204	7:77	~	<u> </u>	ļ	<u> </u>	<u> </u>	<u> </u>	↓	 	<u> </u>	<u> </u>		
16	2.5 23,	<u>1</u>	ــــــــــــــــــــــــــــــــــــــ	┞╌	V	\sqcup		4_		4	2/9/011	2:30 8		<u> </u>	 	<u> </u>	 	ļ	 					
		-	┨	├ -	\perp			-		4			 	 	ļ	_	 	ļ	 	<u> </u>				
<u></u>		╁╌	╄-	$\vdash \vdash$	₩	$\vdash \vdash$		-	\vdash	-				├	 	 	<u> </u>	<u> </u>	 	—	ļ			
		╁	╀	 	-	$\left \cdot \cdot \right $	-	╁	\vdash	+			 -	<u> </u>	-	ļ	-	├	 	┦	ļ		ļ!	
PLEASE NOTE: Liability a	nd Dameges. Cardinal's liability and chent's exclusive remedy for	eny dai	im eris	ng whethe	r based	ln con	Iraci or	lors, stra	il be limi	ted to	the emount pai	d by the client fo	the	<u></u>	<u> </u>	ــــــــــــــــــــــــــــــــــــــ	<u> </u>	1	<u> </u>	Щ.		L		
analyses, All claims include service. In no event shall (ing those for negligence and any other cause whetsoever shall be Cardinal be Eable for incidental or consequental damages, includin	deeme	visw bo Umil lu	ed unless ation, busi	made in noss int	n writing lemuptk	end re ons, loss	caived i	by Cardin or loss o	nai wit of proi	thin 30 days after this incurred by	er completion of t	he applica vies.	ble										
	ing but of or related to the performance of services hereunder by	Cerdine	al, rega		hether								BQ.	□ Y	e [1	No	Addi	Phone	#.					
l	7/11/204	-] -	- A	12)	<i>ا</i>					Fax Resu	lt:	D Y		No		Fax#:						
mac scott	Will 1:05 Pm		R	<u>ت</u>	[<u>) </u>						REMARK	> :											
Relinquished By Date: Received By: Time: 45								21	a	0	W	>												
Delivered By	: (Circle Ohe)	(J		mple ol	Соп	ditio		CHE	CKE	ED BY:	1												
Sampler - UPS	- Bus - Other:	18	0	֓֟֝֟֝֟֟֝֟֟֝ ֚	Yes		Yés		ا) اما		als)													

#26

3-2-2

[†] Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



May 13, 2011

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: CONOCO 7 STATE #12

Enclosed are the results of analyses for samples received by the laboratory on 05/11/11 14:07.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Celey D. Keine

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



TALON LPE MIKE STUBBLEFIELD 408 W. TEXAS AVE. ARTESIA NM, 88210

Fax To:

(575) 745-8905

Received:

05/11/2011

Reported:

05/13/2011

Project Name:

CONOCO 7 STATE #12

Project Number:

701407.002.01

Sampling Date:

04/29/2011

Sampling Type:

Soil

Sampling Condition: Sample Received By: ** (See Notes)

Jodi Henson

Project Location:

SEC. 7- T19S- R29E

Sample ID: S - 3 0' (H100954-01)

•	•								
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Chloride	36000	16.0	05/12/2011	ND	432	108	400	3.64	
			•						
Sample ID: S - 3 1' (H100	954-02)								
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3040	16.0	05/12/2011	ND	432	108	400	3.64	
Sample ID: S - 3 2' (H100	954-03)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM				-	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1680	16.0	05/12/2011	ND	432	108	400	3.64	
Sample ID: S - 3 4' (H100	954-04)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE Liability and Damages Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be lable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiance, affiliables or successors ansing out of or related to the performance of the services hereunder by Cardinal, regardless of whether such



TALON LPE MIKE STUBBLEFIELD 408 W. TEXAS AVE. ARTESIA NM, 88210

(575) 745-8905 Fax To:

Received:

05/11/2011

Sampling Date:

04/29/2011

Reported:

05/13/2011

Sampling Type:

Soil

Project Name:

CONOCO 7 STATE #12

Sampling Condition:

** (See Notes)

Project Number:

701407.002.01

Sample Received By:

Jodi Henson

Project Location:

SEC. 7- T19S- R29E

Sample ID: S - 3 6' (H100954-05)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2160	16.0	05/12/2011	ND	448	112	400	3.64	

Sample ID: S - 3 8' (H100954-06)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2560	16.0	05/12/2011	ND	448	112	400	3.64	

Sample ID: S - 3 10' (H100954-07)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	05/12/2011	ND	448	112	400	3.64	

Cardinal Laboratories

*=Accredited Analyte

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



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

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

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name: Talon / LPE						BILL TO ANALYSIS REQUEST														1							
Project Manager: Mike Stubblefield				F	.O.	#:				\prod													1				
					c	om	pan	y: -	Talon/L	PE.									İ		1	ļ					
City:	Actesia	State: wm Zip: 88210					Attn:																ĺ				
Phone #: \$75 · 441 · 7254 Fax #:					Δ	Address:												-									
					c	City:						-	l				j				1	ļ	1				
Project Name: Congco 2 State No.12					s	State: Zip:						-						- [1					
Project Locatio	n: scc. 7 - T 195.							Р	hor	ne #:					-										ļ		
Sampler Name:								F	ax #	#:														l			
Lab I.D.	Sample I.		(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	5	TRIX	SLUDGE		ICE / COOL			TIME	1	Total cheorides												
H100954.1	5.3 0		4		i				- -	,	1		17:01 P	7	_				1								1
			4		I. T.	10			- .		1		12:05 6										 				
3	5-3 1' 5-3 2'		۵			-				1		4/29/2011		1]				 	ļ <u>.</u>			
<u> </u>	5·3 4' 5·3 6'		4		I. J.				1_	./	<u> </u>	4/29/2011	12:168	1	,				_				 				
5	5.3 6		٦			1		i		·	1	4/29/2011	1:200	1											l		
Ilo_	5.3 8		<u>۾</u>	. .	,	_ <				_\.	_	म्(२१/र०॥		L				ļ	:	_	_		 		·	ļ	
7	5.3 10'		C	.	. .	5		_	_	4	<u> </u>	4/29/2011	2:036	11	<u>.</u>				-		-		 		ļ		
ļ- ·				1-		-					+			.	4-	_		·		٠ .			 		ļ	<u> </u>	-
			ļ		 	+-		<u> -</u>	_ -	-			-	-				 	-	4			 	 -			-
analyses All clams includes sources. In no event shall affiliates or sucressors and Relinquished E		cause whatsdever shall be quental damages, includin	deeme g witho Cardina	ed warv	ed unit ss ation, bus ridess of ved B	made in iness in whether y: , y:	n writer terrupti such c	gandire enslos:	eceived s of us pased t	d by Ca de, or lo upon ar	rdinal ses of proy of the	within 30 days af profils incurred by ne above stalled r	ter completion of client, its subsid	the appl haries. wse esult: ult:		Yes	s []	No No		l'i Pho							
Sampler - UPS	- Bus - Other:		.72		, C	ool Yes	Intae s []	Ýes No		Ć		tials)					w.na		- Cartifornia					C			
† Cardina	cannot accept verbal	changes, Pleas	e fax	x wr	itten	han	ges	to 50	5-3	93-2	476									•					ŀ	Pag	jе