

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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

Form C-141
Revised August 8, 2011

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

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company WPX Energy Production	Contact Deborah Watson
Address PO Box 640	Telephone No. 505-386-9693
Facility Name Chaco Trunk 4 Extension 3 Pipeline	Facility Type Pipeline

Surface Owner Federal/BLM	Mineral Owner Federal/BLM	API No. <u>30-039-31226</u> <u>CS</u>
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	9	23N	07W	357	South	1067	West	Rio Arriba

Latitude N36.23561 Longitude W107.58471

NATURE OF RELEASE

Type of Release Fresh water, drill mud, and bentonite	Volume of Release 10 bbl	Volume Recovered 0 bbl
Source of Release Drilling fluid	Date and Hour of Occurrence 9/27/15; 16:20 hrs	Date and Hour of Discovery 9/27/15; 16:20 hrs
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Katherina Diemer, BLM and Cory Smith NMOCD	
By Whom? Deborah Watson	Date and Hour: September 27, 2015, 14:35 hrs	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse. 10 bbl	

OIL CONS. DIV DIST. 3
OCT 08 2015

If a Watercourse was Impacted, Describe Fully.*
Fresh water, drill mud and bentonite came to the surface while boring under the wash. No water was in the wash at the time of the release. The release remained within the previously impacted area on 9/24.

Describe Cause of Problem and Remedial Action Taken.*
While drilling under Blanco wash, the boring encountered a sand layer causing fresh water, mud, and bentonite to surface in the wash. The fluid was >90% fresh water.

Describe Area Affected and Cleanup Action Taken.*

- Samples were collected on 9/24 from within the area impacted from this release. The release on 9/24/15 and 9/27/15 consisted of the same constituents. The 9/27 release consisted of a higher percentage of fresh water than the 9/24 release. Sampling results from the 9/24 release were non-detect for BTEX, TPH, and chlorides.
- Attached is the MSDS for bentonite as requested by Cory Smith (NMOCD).
- No further actions recommended.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <u>Deborah Watson</u>	OIL CONSERVATION DIVISION	
Printed Name: Deborah Watson	Approved by Environmental Specialist: <u>[Signature]</u>	
Title: Environmental Specialist	Approval Date: <u>9/22/16</u>	Expiration Date:
E-mail Address: deborah.watson@wpenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 10/9/2015	Phone: 505-386-9693	

* Attach Additional Sheets If Necessary #NCS 16 267 53218

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MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name SUPER GEL-X®
Version # 17
Revision date 08-August-2012
CAS # 1302-78-9
Synonym(s) Smectite * Bentonite * Bentonite, Sodian * Bentonite, Calcian * Sodium-activated Bentonite * Montmorillonite
Manufacturer information CETCO
Drilling Products Group
2870 Forbs Avenue
Hoffman Estates, IL 60192 United States
safetydata@amcol.com
http://www.cetco.com/
General Information (800) 527-9948
CHEMTREC® (800) 424-9300

2. Hazards Identification

Potential health effects

Eyes Dust or powder may irritate eye tissue. Mild irritant to eyes (according to the modified Kay & Calandra criteria)

Inhalation Inhalation of dusts may cause respiratory irritation.

Ingestion No significant adverse effects are expected upon ingestion of the product.

Signs and symptoms None known.

3. Composition / Information on Ingredients

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

Constituents	CAS #	Percent
SMECTITE GROUP MINERALS	1318-93-0	
CALCIUM CARBONATE	471-34-1	
QUARTZ	14808-60-7	<= 8
CRISTOBALITE	14464-46-1	<= 2

Composition comments The purity of the product is 100% w/w. Impurities are not applicable for a UVCB substance.

4. First Aid Measures

First aid procedures

Eye contact No specific first aid measures noted. Flush thoroughly with water. If irritation occurs, get medical assistance.

Skin contact No specific first aid measures noted. Wash skin with soap and water. Get medical attention if irritation develops and persists.

Inhalation No specific first aid measures noted. Move to fresh air. Call a physician if symptoms develop or persist.

Ingestion No specific first aid measures noted. Rinse mouth thoroughly. Get medical attention if any discomfort occurs.

Notes to physician Provide general supportive measures and treat symptomatically.

General advice No hazards which require special first aid measures. Provide general supportive measures and treat symptomatically.

5. Fire Fighting Measures

Flammable properties The product is not flammable.

Extinguishing media

- Suitable extinguishing media** Use any media suitable for the surrounding fires.
- Unsuitable extinguishing media** Not applicable, non-combustible.

Protection of firefighters

- Specific hazards arising from the chemical** None known. The product itself does not burn.
- Protective equipment and precautions for firefighters** None known.

- Fire fighting equipment/instructions** Material can be slippery when wet.

6. Accidental Release Measures

- Personal precautions** No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.
- Environmental precautions** No special environmental precautions required. Prevent further leakage or spillage if safe to do so.

7. Handling and Storage

- Handling** Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. In case of insufficient ventilation, wear suitable respiratory equipment.
- Storage** Store in a dry area. Keep the container dry. No special restrictions on storage with other products.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Constituents	Type	Value	Form
INERT OR NUISANCE DUSTS (SEQ250)	TWA	3 mg/m ³	Respirable particles.
		10 mg/m ³	Inhalable particles.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Constituents	Type	Value	Form
INERT OR NUISANCE DUSTS (SEQ250)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Constituents	Type	Value	Form
INERT OR NUISANCE DUSTS (SEQ250)	TWA	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

- Engineering controls** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn.

Personal protective equipment

- Eye / face protection** Wear dust-resistant safety goggles where there is danger of eye contact.
- Skin protection** No special protective equipment required. Normal work clothing (long sleeved shirts and long pants) is recommended.
- Respiratory protection** Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.
- General hygiene considerations** Use good industrial hygiene practices in handling this material.

9. Physical & Chemical Properties

- Appearance** Lump, granular or fine powder.
- Physical state** Solid.

Form	Various.
Color	Various.
Odor	None.
Odor threshold	Not applicable.
pH	8.5 - 11
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Boiling point	Not applicable.
Melting point/Freezing point	> 842 °F (> 450 °C) / Not applicable.
Solubility (water)	< 0.9 mg/l
Specific gravity	Not applicable.
Relative density	2.6 g/cm ³
Flash point	Not applicable.
Flammability limits in air, upper, % by volume	Not applicable.
Flammability limits in air, lower, % by volume	Not applicable.
Auto-ignition temperature	Not applicable.
VOC	0 %
Viscosity	Not applicable.
Viscosity temperature	Not applicable.
Percent volatile	0 %
Partition coefficient (n-octanol/water)	Not applicable. Not applicable.
Flammability (Train fire)	Not applicable.
Bulk density	0.9 - 1.4 g/cm ³
Molecular weight	Not applicable.
Molecular formula	UVCB Substance
Other data	
Decomposition temperature	> 932 °F (> 500 °C)
Explosive limit	Not applicable.
Explosive properties	Not explosive
Explosivity	Not applicable.
Flame extension	Not applicable.
Flammability	Not applicable.
Flammability (flash back)	Not applicable.
Flammability (Heat of combustion)	Not applicable.
Flammability (solid, gas)	This product is not flammable.
Flammability class	Not applicable.
Flash point class	Not flammable
Oxidizing properties	None.
pH in aqueous solution	8.5 - 11

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Moisture.
Incompatible materials	None known.
Hazardous decomposition products	None.

Possibility of hazardous reactions Will not occur.

11. Toxicological Information

Toxicological data

Product	Species	Test Results
Bentonite (1302-78-9)		
Acute		
<i>Inhalation</i>		
LC50	Rat	> 5.27 mg/l, 4 hr, OECD 436
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg, OECD 425
Sensitization	Not classified.	
Acute effects	Not classified.	
Carcinogenicity	No carcinogenicity data available for this product. Sepiolite was evaluated by IARC as class 3 ("Cannot be classified as to carcinogenicity to humans"). Based on read-across with sepiolite, bentonite was assessed as non-carcinogenic. Therefore classification of bentonite for carcinogenicity is not warranted.	
Skin corrosion/irritation	Not classified.	
Mutagenicity	Not classified.	
Reproductive effects	Not classified.	
Symptoms and target organs	None known.	

12. Ecological Information

Ecotoxicological data

Product	Species	Test Results
Bentonite (1302-78-9)		
Crustacea	EC50 Daphnia	> 100 mg/l, 48 hours
Other	EC50 Freshwater algae	> 100 mg/l, 72 hours
	LC50 Freshwater fish	16000 mg/l, 96 hours
	Marine water fish	2800 - 3200 mg/l, 24 hours
Aquatic		
Crustacea	EC50 Coon stripe shrimp (<i>Pandalus danae</i>)	24.8 mg/l, 96 hours
	Dungeness or edible crab (<i>Cancer magister</i>)	81.6 mg/l, 96 hours
Persistence and degradability	Not relevant for inorganic substances	
Bioaccumulation / Accumulation	Will not bio-accumulate.	
Mobility in environmental media	Low water solubility, expected to sink and migrate into the sediment. Expected to partition to sediment and wastewater solids.	

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Store containers and offer for recycling of material when in accordance with the local regulations.

14. Transport Information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2))

Not regulated.

DEA Essential Chemical Code Number

Not regulated.

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated.

DEA Exempt Chemical Mixtures Code Number

Not regulated.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Recommended restrictions None known.

Further information This safety datasheet only contains information relating to safety and does not replace any product information or product specification.
UVCB = a substance of Unknown or Variable composition, Complex reaction products or Biological materials
SWERF = Size Weighted Respirable Fraction methodology is a scientific method developed to quantify the content of respirable particles within a bulk product. All details about the SWERF method are available at www.crystallinesilica.eu.
HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings
Health: 1
Flammability: 0
Physical hazard: 0

NFPA ratings
Health: 1
Flammability: 0
Instability: 0

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Issue date

20-November-2007

This data sheet contains changes from the previous version in section(s):

Product and Company Identification: Synonyms
Composition / Information on Ingredients: Composition comments
Toxicological Information: Carcinogenicity
Other Information: Further information



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 28, 2015

Debbie Watson
WPX Energy
721 S Main Ave
Aztec, NM 87410
TEL: (505) 333-1880
FAX

OIL CONS. DIV DIST. 3

NOV 25 2015

RE: Blanco Wash

OrderNo.: 1509B90

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/25/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

OIL CONS. DIV DIST. 3

NOV 25 2015

Analytical Report

Lab Order 1509B90

Date Reported: 9/28/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy

Client Sample ID: SC-1

Project: Blanco Wash

Collection Date: 9/24/2015 12:38:00 PM

Lab ID: 1509B90-001

Matrix: MEOH (SOIL)

Received Date: 9/25/2015 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	9/25/2015 12:02:52 PM	21506
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	9/25/2015 11:49:27 AM	D29107
Surr: BFB	98.0	70-130		%REC	1	9/25/2015 11:49:27 AM	D29107
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/25/2015 11:45:21 AM	21499
Surr: DNOP	91.0	57.9-140		%REC	1	9/25/2015 11:45:21 AM	21499
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.033		mg/Kg	1	9/25/2015 11:49:27 AM	B29107
Toluene	ND	0.033		mg/Kg	1	9/25/2015 11:49:27 AM	B29107
Ethylbenzene	ND	0.033		mg/Kg	1	9/25/2015 11:49:27 AM	B29107
Xylenes, Total	ND	0.066		mg/Kg	1	9/25/2015 11:49:27 AM	B29107
Surr: 1,2-Dichloroethane-d4	97.8	70-130		%REC	1	9/25/2015 11:49:27 AM	B29107
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	9/25/2015 11:49:27 AM	B29107
Surr: Dibromofluoromethane	106	70-130		%REC	1	9/25/2015 11:49:27 AM	B29107
Surr: Toluene-d8	95.2	70-130		%REC	1	9/25/2015 11:49:27 AM	B29107

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	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	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1509B90

28-Sep-15

Client: WPX Energy

Project: Blanco Wash

Sample ID	MB-21506	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	21506	RunNo:	29121					
Prep Date:	9/25/2015	Analysis Date:	9/25/2015	SeqNo:	884260	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-21506	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	21506	RunNo:	29121					
Prep Date:	9/25/2015	Analysis Date:	9/25/2015	SeqNo:	884261	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.3	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1509B90
28-Sep-15

Client: WPX Energy
Project: Blanco Wash

Sample ID MB-21499	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 21499		RunNo: 29100							
Prep Date: 9/25/2015	Analysis Date: 9/25/2015		SeqNo: 883407				Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.3		10.00		92.9	57.9	140			

Sample ID LCS-21499	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 21499		RunNo: 29100							
Prep Date: 9/25/2015	Analysis Date: 9/25/2015		SeqNo: 883434				Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.0	57.4	139			
Surr: DNOP	4.3		5.000		86.9	57.9	140			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1509B90

28-Sep-15

Client: WPX Energy

Project: Blanco Wash

Sample ID	rb5	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	B29107	RunNo:	29107					
Prep Date:		Analysis Date:	9/26/2015	SeqNo:	884384	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		98.2	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		109	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		109	70	130			
Surr: Toluene-d8	0.50		0.5000		101	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	B29107	RunNo:	29107					
Prep Date:		Analysis Date:	9/25/2015	SeqNo:	884385	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	108	70	130			
Toluene	1.1	0.050	1.000	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.1	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		109	70	130			
Surr: Toluene-d8	0.50		0.5000		99.1	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1509B90

28-Sep-15

Client: WPX Energy

Project: Blanco Wash

Sample ID rb	SampType: MBLK		TestCode: EPA Method 8015D Mod: Gasoline Range							
Client ID: PBS	Batch ID: D29107		RunNo: 29107							
Prep Date:	Analysis Date: 9/25/2015		SeqNo: 884481				Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	480		500.0		96.4	70	130			

Sample ID 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D Mod: Gasoline Range							
Client ID: LCSS	Batch ID: D29107		RunNo: 29107							
Prep Date:	Analysis Date: 9/25/2015		SeqNo: 884482				Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.9	70	123			
Surr: BFB	490		500.0		98.8	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit



Hall Environmental Analysis Laboratory
 4901 Hawkins NE
 Albuquerque, NM 87109
 TEL: 505-345-3975 FAX: 505-345-4107
 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **WPX ENERGY** Work Order Number: **1509B90** RcptNo: **1**

Received by/date: *[Signature]* **09/25/15**
 Logged By: **Lindsay Mangin** **9/25/2015 7:30:00 AM** *[Signature]*
 Completed By: **Lindsay Mangin** **9/25/2015 7:58:04 AM** *[Signature]*
 Reviewed By: *[Signature]* **09/25/15**

Chain of Custody

- 1. Custody seals intact on sample bottles? Yes No Not Present
- 2. Is Chain of Custody complete? Yes No Not Present
- 3. How was the sample delivered? Courier

Log In

- 4. Was an attempt made to cool the samples? Yes No NA
 - 5. Were all samples received at a temperature of >0° C to 6.0°C Yes No NA
 - 6. Sample(s) in proper container(s)? Yes No
 - 7. Sufficient sample volume for indicated test(s)? Yes No
 - 8. Are samples (except VOA and ONG) properly preserved? Yes No
 - 9. Was preservative added to bottles? Yes No NA
 - 10. VOA vials have zero headspace? Yes No No VOA Vials
 - 11. Were any sample containers received broken? Yes No
 - 12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes No
 - 13. Are matrices correctly identified on Chain of Custody? Yes No
 - 14. Is it clear what analyses were requested? Yes No
 - 15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes No
- # of preserved bottles checked for pH:
(<2 or >12 unless noted)
Adjusted?
Checked by:

Special Handling (if applicable)

- 16. Was client notified of all discrepancies with this order? Yes No NA

Person Notified: _____ Date: _____
 By Whom: _____ Via: eMail Phone Fax In Person
 Regarding: _____
 Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			

