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 8750

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe. NM 87505

Form C-144 Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.

For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87505	to the appropriate NMOCD District Office.
12740 39-29217 Proposed Alterna	Pit, Below-Grade Tank, or tive Method Permit or Closure	RECEIVED By OCD 3-4-15
Type of action:  Below grad Permit of a Closure of Modificati Closure pla	de tank registration  pit or proposed alternative method  a pit, below-grade tank, or proposed alternative apit, below-grade tank, or proposed alternation  an only submitted for an existing permitted	ative method
or proposed alternative method		
Instructions: Please submit one applease be advised that approval of this request does not reliavironment. Nor does approval relieve the operator of its	pplication (Form C-144) per individual pit, belo ieve the operator of liability should operations resul responsibility to comply with any other applicable	t in pollution of surface water, ground water or the
Operator: _ConocoPhillips Company	OGRID#: 2178	317
Address: PO BOX 4289, Farmington, NM 8		
Facility or well name: San Juan 30-5 Unit 209A		
API Number: 30-039-29217		
U/L or Qtr/Qtr O (SWSE) Section 30 Townsh		
Center of Proposed Design: Latitude 36.77776000		
Surface Owner: Sederal State Private Tr		
2.    Pit: Subsection F, G or J of 19.15.17.11 NMACTEMPORARY:   Drilling   Workover   Permanent   Emergency   Cavitation   P&A     Lined   Unlined Liner type: Thickness   String-Reinforced     Liner Seams:   Welded   Factory   Other	Closed Prior  Multi-Well Fluid Management  mil LLDPE HDPE PVC	Other
3.    Below-grade tank: Subsection I of 19.15.17.11   Volume:	fluid:Produced Water  Visible sidewalls, liner, 6-inch lift and automatic s only  Other	
4.  Alternative Method: Submittal of an exception request is required. Exception	otions must be submitted to the Santa Fe Environ	nmental Bureau office for consideration of approval.
5.  Fencing: Subsection D of 19.15.17.11 NMAC (App  Chain link, six feet in height, two strands of barbe institution or church)  Four foot height, four strands of barbed wire ever	ed wire at top (Required if located within 1000 fe	

Alternate. Please specify

Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen Netting Other  Monthly inspections (If netting or screening is not physically feasible)			
5igns: Subsection C of 19.15.17.11 NMAC  ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers  ☐ Signed in compliance with 19.15.16.8 NMAC			
Variances and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  Please check a box if one or more of the following is requested, if not leave blank:  Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.			
9. Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accept material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	otable source		
General siting			
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.  - □ NM Office of the State Engineer - iWATERS database search; □ USGS; ☑ Data obtained from nearby wells	☐ Yes ☒ No ☐ NA		
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☑ NA		
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks)  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No		
Within the area overlying a subsurface mine. (Does not apply to below grade tanks) - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No		
Within an unstable area. (Does not apply to below grade tanks)  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No		
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	☐ Yes ☐ No		
Below Grade Tanks			
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ⊠ No		
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site			
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)			
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No		
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	☐ Yes ☐ No		
application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image			
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No		

Within 100 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No					
Temporary Pit Non-low chloride drilling fluid						
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No					
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No					
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No					
Within 300 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site						
Permanent Pit or Multi-Well Fluid Management Pit						
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).						
- Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No					
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No					
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.						
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No					
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No					
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 N  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached.  Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number:  or Permit Number:	NMAC  15.17.9 NMAC					
Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached.  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  A List of wells with approved application for permit to drill associated with the pit.  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 and 19.15.17.13 NMAC  Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Previously Approved Design (attach copy of design) API Number: or Permit Number: or Permit Number:	9.15.17.9 NMAC					

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Climatological Factors Assessment Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC Quality Control/Quality Assurance Construction and Installation Plan Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Errosion Control Plan Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC				
Proposed Closure: 19.15.17.13 NMAC  Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.  Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well Flue Alternative  Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial Alternative Closure Method	uid Management Pit			
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be a closure plan. Please indicate, by a check mark in the box, that the documents are attached.  □ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC □ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC □ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) □ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC □ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC □ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	ttached to the			
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC  Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Pt. 19.15.17.10 NMAC for guidance.				
Ground water is less than 25 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA			
Ground water is between 25-50 feet below the bottom of the buried waste  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA			
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells				
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site				
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image				
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.  NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site				
Written confirmation or verification from the municipality; Written approval obtained from the municipality  Yes No				
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site				
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance				

- Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain FEMA map	☐ Yes ☐ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC  Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cann Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	.11 NMAC 15.17.11 NMAC
17. Operator Application Certification:	
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and believe to the best of my knowled	
Name (Print): Title:	
Cionatura	
Signature: Date:	
e-mail address: Telephone:	
e-mail address: Telephone:	
e-mail address: Telephone:	
e-mail address:	Apr 24, 2015
e-mail address:    Telephone:	Apr 24, 2015  g the closure report. t complete this

22.	
Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closur belief. I also certify that the closure complies with all applicable closure requir	
Name (Print): Kenny Davis	Title: _Staff Regulatory Technician
Signature:	Date:12/2/14
e-mail address: kenny.r.davis@conocophillips.com	Telephone: 505-599-4045

#### ConocoPhillips Company San Juan Basin Below Grade Tank Closure Report

Lease Name: SAN JUAN 30-5 UNIT 209A

API No.: 30-039-29217

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure of the below-grade tank referenced above. All proper documentation regarding closure activities is being included with the C-144.

#### General Plan:

- COPC shall close a below-grade tank within 60 days of cessation of operations per Subsection G.4 of 19.15.17.13
   NMAC. This will include a) below-grade tanks that do not meet the requirements of Paragraphs (1) through (4) of
   Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five
   years, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC; b) an earlier
   date that the division requires because of imminent danger to fresh water, public health or the environment. For any
   closure, BR will file the C144 Closure Report as required.
- 2. The below-grade tank referenced above was permitted and closed within 60 days of cessation of the below-grade tanks operation.
- 3. COPC shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility. The facilities to be used will be Basin Disposal (Permit #NM-01-005), JFJ Landfarm % Industrial Ecosystem Inc. (Permit #NM-01-0010B) and Envirotech Land Farm (Permit #NM-01-011). The liner after being cleaned well (Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC) will be disposed of at the San Juan County Regional Landfill located on CR 3100.

All recovered liquids were disposed of at Basin Disposal (Permit #NM-01-005) and any sludge or soil required to be removed to facilitate closure was hauled to Envirotech Land Farm (Permit #NM-01-011) and JFJ Landfarm % IEI (Permit #NM-01-0010B). The liner was cleaned per Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC was disposed of at the San Juan County Regional Landfill located on CR 3100.

4. COPC Will receive prior approval to remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.

The below-grade tank was disposed of in a division-approved manner.

5. If there is any on-site equipment associated with a below-grade tank, then COPC shall remove the equipment, unless the equipment is required for some other purpose.

All on-site equipment associated with the below-grade tank was removed.

6. COPC will test the soils beneath the below-grade tank to determine whether a release has occurred. COPC shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyzed for the constituents listed in Table I of 19.15.17.13 NMAC. COPC shall notify the division of its results on form C-141.



 A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Subsection B of 19,15.17.1 3(B)(1)(b). (Sample results attached).

Components	Tests Method	Limit (mg/kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	100
Chlorides	EPA 300.1	250

8. If COPC or the division determines that a release has occurred, then COPC shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

A release was not determined for the above referenced well.

9. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Table I of 19.15.17.13 NMAC, then COPC shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.

The below-grade tank area passed all requirements of Paragraph (4) of Subsection E of 19.15.17.13 NMAC and was backfilled with compacted, non-waste containing, earthen material.

- 10. Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week via email or verbally. The notification of closure will include the following:
  - i. Operator's name

notification.

ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.

Notification is missing due to employee turnovers. ConocoPhillips has reviewed our internal processes and has updated them to include the required 72 hour notification.

11. The surface owner shall be notified of COPC's closing of the below-grade tank 72 hours, but not more than one week, prior to closure as per the approved closure plan via certified mail, return receipt requested.

The closure process notification to the landowner not found. COPC was not aware that the original notification sent at the time of Permitting was not the only closure notification required.

ConocoPhillips has reviewed our internal processes and has updated them to include the required 72 hour

12. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

The below-grade tank area was re-contoured to match fit, shape, line, form and texture of the surrounding area. Re-shaping, including drainage control, to prevent ponding and erosion. Natural drainages were unimpeded and water bars and/or silt traps were placed in areas where needed to prevent erosion on a large scale. Final recontour has a uniform appearance with smooth surface, fitting the natural landscape.

13. COPC Shall seed the disturbed areas the first favorable growing season following closure of a below-grade tank. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved

methods. BLM stipulated seed mixes will used on federally regulated lands and division-approved seed mixtures (administratively approved if required) will be utilized on all State or private lands. A uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre- disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed. COPC will repeat seeding or planting will be continued until successful vegetative growth occurs.

Provision 13 was accomplished through complying with BLM seeding requirements as allowed by the BLM/OCD MOU.

14. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material, with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

The below-grade tank area was backfilled and more than four feet of cover was achieved and the cover included one foot of suitable material to establish vegetation at the site.

- 15. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on C-144 and incorporate the following:
  - Soil Backfilling and Cover Installation (See Report)
  - Re-vegetation application rates and seeding techniques (See Report)
  - Photo documentation of the site reclamation (Included as an attachment)
  - Confirmation Sampling Results (Included as an attachment)
  - Proof of closure notice (Included as an attachment)

Closure Documentation was not submitted within the 60 day requirement due to employee turnovers.

ConocoPhillips has reviewed our internal processes and has updated them to ensure closure documentation is submitted with the 60 day time frame.

<u>District I</u> 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

Form C-141 Revised August 8, 2011 Submit 1 Copy to appropriate District Office to accordance with 19.15.29 NMAC.

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

Release Notification	n and Co	rrective Ac	ction			
	OPERAT		[	Initia	l Report	
Name of Company ConocoPhillips Company	Contact Cr	ystal Tafoya				
Address 3401 East 30 <sup>th</sup> St, Farmington, NM		No.(505) 326-983	37			
Facility Name: San Juan 30-5 Unit 209A	Facility Typ	e: Gas Well				
Surface Owner BLM Mineral Owner	BLM (SF-0"	78740)		API No	.30-039-29217	
LOCATIO	N OF RE	LEASE				
Sit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County						
O 30 30N 5W 525	South	1565	E	Cast	KIO AFFIDA	
Latitude <u>36.777</u> ′	76 Longitue	de <u>107.39444</u>				
NATURI	E OF REL					
Type of Release Produced Fluids	Volume o	f Release	22		Recovered Hour of Discovery	
Source of Release Below Grade Tank	Date and	Hour of Occurrence	ic	Date and	Tiour or District,	
Was Immediate Notice Given?	If YES, T	o Whom?				
Was miniediate Notice Given:  ☐ Yes ☐ No ☒ Not Require						
By Whom?	Date and	Hour olume Impacting	the Wate	ercourse.		
Was a Watercourse Reached?  ☐ Yes ☒ No	H IES, V	Ofunic Impacting	tile ti ac			
If a Watercourse was Impacted, Describe Fully.*						
Describe Cause of Problem and Remedial Action Taken.*						
Below Grade Tank Closure Activities						
Book Grad 2						
Describe Area Affected and Cleanup Action Taken.*	100	Sail complet wer	e taken	and then t	ransported to the lab and	
The regulatory standard for closure at this site was determined to					idelines for Remediation of	
analytical results for TPH, BTEX and Chlorides were below the Release, Spills and Release; therefore no further action is required.	The final rep	ort is attached fo	or reviev	٧.		
Dento, Spine and						
				1.11.1	NIMOCD rules and	
I hereby certify that the information given above is true and complete	to the best of r	ny knowledge and	l underst	and that pu	releases which may endanger	
regulations all operators are required to report and/or the certain relea.	of Hotification		Deport"	does not r	elieve the operator of liability	
public health or the environment. The acceptance of a C-141 report by should their operations have failed to adequately investigate and reme	diate contamir	nation that pose a t	threat to	ground wa	ter, surface water, human health	
or the environment. In addition, NMOCD acceptance of a C-141 Tepe	rt does not rel	ieve the operator	1		•	
federal, state, or local laws and/or regulations.		OIL CO	NSER	VATIO	N DIVISION	
10 11		-				
Signature:	Ammound	by Environmenta	1 Special	ist:		
Signature:	Approved	by Environmenta	Specia			
Printed Name: Crystal Tafoya					ACC 10	
Title: Field Environmental Specialist	Approval	Date:		Expirati	on Date:	
	Condition	s of Approval:			Attached	
E-mail Address: crystal.tafoya@conocophillips.com	Condition				Attached	
Date: 1/22/2013 Phone: (505) 326-9837						
* Attach Additional Sheets If Necessary						

AES

Animas Environmental Services, LLC

January 18, 2013

Crystal Tafoya ConocoPhillips San Juan Business Unit Office 214-05 5525 Hwy 64 Farmington, New Mexico 87401 624 E. Comanche

www.animasenvironmental.com

Farmington, NM 87401 505-564-2281

> Durango, Colorado 970-403-3084

RE:

**Below Grade Tank Closure Report** 

San Juan 30-5 #209A

Rio Arriba County, New Mexico

Dear Ms. Tafoya:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (CoP) San Juan 30-5 #209A, located in Rio Arriba County, New Mexico. Tank removal had been completed by CoP contractors prior to AES' arrival at the location.

#### 1.0 Site Information

#### 1.1 Location

Site Name – San Juan 30-5 #209A
Legal Description – SW¼ SE¼, Section 30, T30N, R5W, Rio Arriba County, New Mexico
Well Latitude/Longitude – N36.77777 and W107.39504, respectively
BGT Latitude/Longitude – N36.77789 and W107.39545, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, December 2012

# 1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a C-144 form dated December 2005 for the San Juan 30-5 #209A reported the depth to groundwater as less than 50 feet below ground surface (bgs). The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells, and no registered water wells were reported to be located within 1,000 feet of the location. Additionally, Google Earth and the New Mexico Tech Petroleum Recovery

Crystal Tafoya San Juan 30-5 #209A BGT Closure Report January 18, 2013 Page 2 of 5

Research Center online mapping tool (<a href="http://ford.nmt.edu/react/project.html">http://ford.nmt.edu/react/project.html</a>) were accessed to aid in the identification of downgradient surface water.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was between 50 and 99 feet bgs. An unnamed wash which drains to La Jara Canyon is located approximately 680 feet west of the location. Based on this information, the location was assessed a ranking score of 20.

#### 1.3 BGT Closure Assessment

AES was initially contacted by Bruce Yazzie, CoP representative, on December 4, 2012, and on December 5, 2012, Deborah Watson and Zachary Trujillo of AES mobilized to the location. AES personnel collected six soil samples from below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample was composited from the four perimeter samples and one center sample.

#### 2.0 Soil Sampling

On December 5, 2012, AES personnel conducted field screening and collected five soil samples (S-1 through S-5) and one 5-point composite (SC-1) from below the BGT. Soil samples were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH). Soil sample SC-1 was field screened for VOCs and chloride and was submitted for confirmation laboratory analysis. Soil sample locations are included on Figure 2.

# 2.1 Field Screening

2.1.1 Volatile Organic Compounds

A portion of each sample was utilized for field screening of VOC vapors with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

2.1.2 Total Petroleum Hydrocarbons

Soil samples were also analyzed in the field for TPH per USEPA Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES's Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1.

#### 2.1.3 Chlorides

Soil sample SC-1 was field screened for chlorides using Chloride Drop Count Titration with silver nitrate. Sampling and analysis methods followed procedures provided by Hach Company.

# 2.2 Laboratory Analyses

The composite soil sample SC-1 collected for laboratory analysis was placed into a new, clean, laboratory-supplied container, which was then labeled, placed on ice, and logged onto a sample chain of custody record. The sample was maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Soil sample SC-1 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B; and
- Chloride per USEPA Method 300.0.

# 2.3 Field and Laboratory Analytical Results

Field screening readings for VOCs via OVM ranged from 0.0 ppm in S-1 up to 2.4 ppm in S-2. Field TPH concentrations were less than 20.0 mg/kg in each sample (S-1 through S-5). The field chloride concentration in SC-1 was 40 mg/kg. Field screening results are summarized in Table 1 and presented on Figure 2. The AES Field Screening Report is attached.

Table 1. Soil Field Screening VOCs, TPH, and Chloride Results

30	11 Juan 30-3 #2	Depth	VOCs OVM	Field	Field
	Date	below	Reading	TPH (m)	Chlorides
Sample ID	Sampled	BGT (ft)	(ppm)	(mg/kg)	(mg/kg)
NMOCD Action L	evel (NMAC 19.	15.17.13E)	pa 44	100	250
S-1	12/05/12	0.5	0.0	<20.0	NA
S-2	12/05/12	0.5	2.4	<20.0	NA
S-3	12/05/12	0.5	1.7	<20.0	NA
S-4	12/05/12	0.5	1.0	<20.0	NA
S-5	12/05/12	0.5	0.4	<20.0	NA
SC-1	12/05/12	0.5	0.2	NA	40

NA - not analyzed

Laboratory analytical results reported benzene and total BTEX concentrations in SC-1 as less than 0.050 mg/kg and 0.25 mg/kg, respectively. The laboratory chloride

concentration was reported below the laboratory detection limit of 30 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. Laboratory analytical reports are attached.

Table 2. Soil Laboratory Analytical Results San Juan 30-5 #209A BGT Closure, December 2012

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH- GRO (mg/kg)	TPH- DRO (mg/kg)	Chlorides (mg/kg)
NMOCD Action	Level (NMAC 19.15	.17.13E)	0.2	50	1	00	250
SC-1	12/05/12	0.5	<0.050	<0.25	NA	NA	<30

NA - not analyzed

### 3.0 Conclusions and Recommendations

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations were below the NMOCD action level of 100 mg/kg, with concentrations reported below 20.0 mg/kg in each sample. Chloride concentrations in SC-1 were below the NMOCD action level of 250 mg/kg. Benzene and total BTEX concentrations in SC-1 were below the NMOCD action level of 0.2 mg/kg and 50 mg/kg, respectively. Based on field screening and laboratory analytical results for benzene, total BTEX, TPH, and chlorides, no further work is recommended at the San Juan 30-5 #209A.

If you have any questions about this report or site conditions, please do not hesitate to contact Deborah Watson at (505) 564-2281.

Sincerely,

Landrea Cupps

**Environmental Scientist** 

Elizabeth V McNdly

Landre R. Cupps

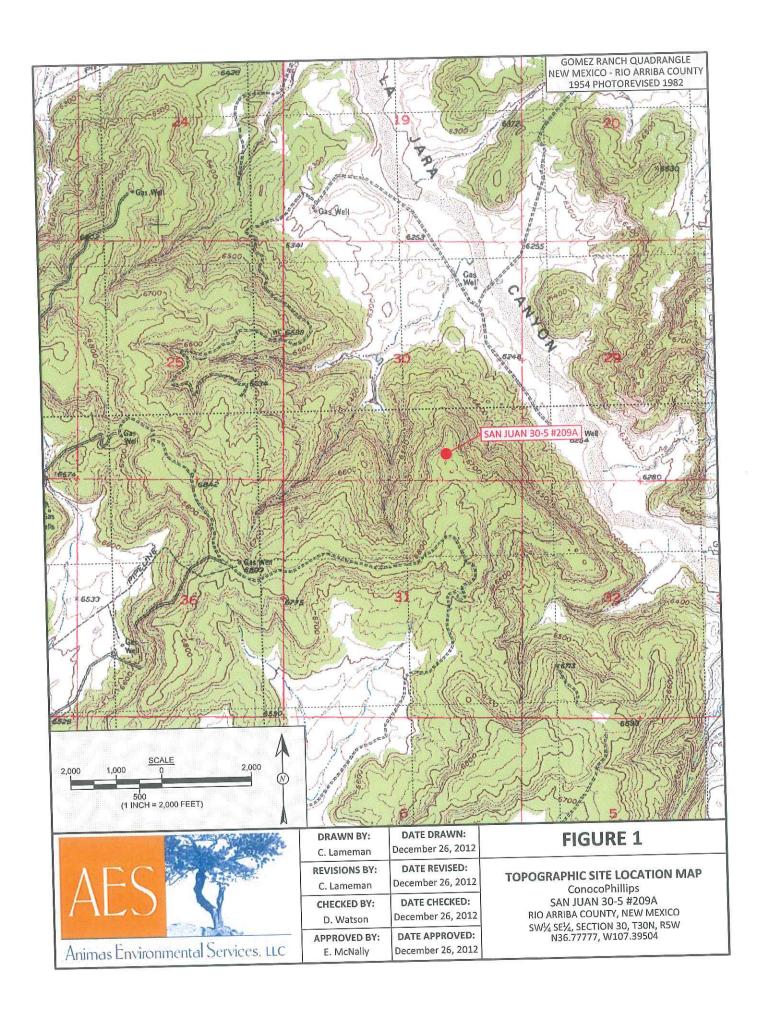
Elizabeth McNally, P.E.

Crystal Tafoya San Juan 30-5 #209A BGT Closure Report January 18, 2013 Page 5 of 5

#### Attachments:

Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, December 2012 AES Field Screening Report 120512 Hall Analytical Report 1212290

 $C:\Users\Lany\Lap\Dropbox\2013\ Projects\ConocoPhillips\SJ\ 30-5\ \#209A\San\ Juan\ 30-5\ \#209A\ BGT\ Closure\ Report\ 011813.docx$ 





SAMPLE LOCATIONS

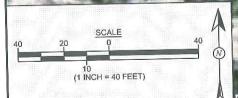
	Field Scre	ening R	esults	Miggiundila
Sample ID	Date	OVM- PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD AC	TION LEVEL	-	100	250
S-1	12/5/12	0.0	<20.0	NA
S-2	12/5/12	2.4	<20.0	NA
S-3	12/5/12	1.7	<20.0	NA
S-4	12/5/12	1.0	<20.0	NA NA
S-5	12/5/12	0.4	<20.0	NA
SC-1	12/5/12	0.2	NA	40

100000000000000000000000000000000000000			
SC-1 IS A 5-PC	INT COMPOSIT	TE SAMPLE	OF S-1
The second secon	NA - NOT AN	STATES AND LOCATIONS	

Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (ma/ka)	Chlorides (mg/kg)
NMOCD ACT	ION LEVEL	0.2	50 (mg/kg)		00	250
SC-1	12/5/12	<0.050	<0.25	NA	NA	<30

BGT - N36.77789 W107.39545

SAN JUAN 30-5 #209A MONUMENT-



AERIAL SOURCE: © 2012 MICROSOFT CORPORATION - AVAILABLE EXCLUSIVELY BY DIGITALGLOBE



	DRAWN BY: C. Lameman	DATE DRAWN: December 26, 2012	
	REVISIONS BY: C. Lameman	DATE REVISED: December 26, 2012	
	CHECKED BY: D. Watson	DATE CHECKED: December 26, 2012	
-	APPROVED BY: E. McNally	DATE APPROVED: December 26, 2012	

# AERIAL SITE MAP BELOW GRADE TANK CLOSURE DECEMBER 2012

ConocoPhillips SAN JUAN 30-5 #209A RIO ARRIBA COUNTY, NEW MEXICO SW¼ SE¼, SECTION 30, T30N, R5W N36.77777, W107.39504

# **AES Field Screening Report**

Client: ConocoPhillips

624 E. Comanche Farmington, NM 87401 505-564-2281

Animas Environmental Services. LLC

www.animasenvironmental.com

Durango, Colorado 970-405-3274

Project Location: San Juan 30-5 #209A

Date: 12/5/2012

Matrix: Soil

					7	HOT MICH				HAL
		Time of			Field	בובות	2	IOG TIGH		Analysts
	noi+ion	Sample	Sample	OVIM	Chloride	Analysis	Field IPH"	ויין וייין ויייין וייין וייין ויייין וייין ויייין וייין וייין וייין וייין וייין ויייין וייין וייין ויייין ויייין וייייין ויייין ויייין וייין ויייין וייין וייין וייין וייין וי	Ĺ	عاد:+نحا
		Jelinpi Peripi	location	(man)	(mg/kg)	Time	(mg/kg)	(mg/kg)	4	Illindis
Sample ID	Date	Collection	LOCATION	(	ò			C	_	DAW
	200/ 1/07		North	0.0	NA	10:09	<20.0	20.0	-1	
S-1	12/5/2012	2,43	1000					0	,	MAG
			4+1.00	D C	NA	10:12	<20.0	70.0	-1	
S-2	12/5/2012	9:75	SOUTH					0	7	WV/
			i (	17	NA	10:16	<20.0	20.0	7	200
5-3	12/5/2012	9:78	Edst	7:-7					7	WVC
			Wort	0	AN	10:18	<20.0	20.0	-1	27.7
S-4	12/5/2012	9:30	VVCSL	2				c	<u></u>	DAW
	700/ 1/ 07	0.27	Center	0.4	NA	10:51	<20.0	20.0	-1	
S-5	7707/5/71		200					T and from T	Da.	
,	12/11/17	0.40	Composite	0.2	40		Not	Not Analyzea Joi 1711.	11.	
1	77/2/2/77	1								

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with

Silver Nitrate

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

\*Field TPH concentrations recorded may be below PQL. Dilution Factor DF

Not Detected at the Reporting Limit

Not Analyzed

Practical Quantitation Limit

PQL

2 ΝA



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

December 10, 2012

Debbie Watson
Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 486-4071
FAX

RE: COP San Juan 30-5 #209A

OrderNo.: 1212290

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/6/2012 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> or the state specific web sites. 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. 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.

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 12/10/2012

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

COP San Juan 30-5 #209A

Project: 1212290-001 Lab ID:

Matrix: MEOH (SOIL)

Collection Date: 12/5/2012 9:40:00 AM Received Date: 12/6/2012 9:55:00 AM

Client Sample ID: SC-1

Avelung	Result	RL Qu	al Units	DF	Date Analyzed
Analyses					Analyst: NSB
EPA METHOD 8021B: VOLATILES	ND	0.050	mg/Kg	1	12/6/2012 12:21:53 PM
Benzene	ND ND	0.050	mg/Kg	1	12/6/2012 12:21:53 PM
Toluene	ND	0.050	mg/Kg	1	12/6/2012 12:21:53 PM
Ethylbenzene	ND	0.10	mg/Kg	1	12/6/2012 12:21:53 PM
Xylenes, Total Surr: 4-Bromofluorobenzene	95.3	80-120	%REC	1	12/6/2012 12:21:53 PM
					Analyst: JRR
EPA METHOD 300.0: ANIONS Chloride	ND	30	mg/Kg	20	12/6/2012 11:16:50 AM

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range Е
- Analyte detected below quantitation limits
- Sample pH greater than 2
- Reporting Detection Limit

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded H
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits

# **QC SUMMARY REPORT**

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1212290

10-Dec-12

Client:

Animas Environmental Services

Project:

COP San Juan 30-5 #209A

Sample ID MB-5132

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

Batch ID: 5132

RunNo: 7343

12/6/2012 Prep Date:

Analysis Date: 12/6/2012

SeqNo: 212931

Units: mg/Kg

HighLimit

%RPD

%RPD

Analyte Chloride

Result PQL ND 1.5

Sample ID LCS-5132

Client ID: LCSS

SampType: LCS Batch ID: 5132 TestCode: EPA Method 300.0: Anions

SPK value SPK Ref Val %REC LowLimit

0

RunNo: 7343

Prep Date:

12/6/2012

Analysis Date: 12/6/2012

SegNo: 212932

Units: mg/Kg

HighLimit

Analyte

Result 14

SPK value SPK Ref Val PQL 15.00

%REC LowLimit 0 94 1

110

**RPDLimit** %RPD

**RPDLimit** 

Qual

Qual

Chloride

Sample ID 1212241-001AMS

SampType: MS

PQL

7.5

TestCode: EPA Method 300.0: Anions RunNo: 7343

Client ID:

BatchQC

Batch ID: 5132

Units: mg/Kg

Prep Date:

12/6/2012

Analysis Date: 12/6/2012

SeqNo: 212935

Analyte

Result

SPK value SPK Ref Val

%REC LowLimit 96.1

HighLimit

**RPDLimit** 

Qual

Chloride

Sample ID 1212241-001AMSD

SampType: MSD

TestCode: EPA Method 300.0: Anions RunNo: 7343

117

Client ID:

12/6/2012 Prep Date:

BatchQC

Batch ID: 5132 Analysis Date: 12/6/2012

7.5

SeqNo: 212936

Units: mg/Kg

%RPD

Qual

Analyte Chloride

PQL Result 14

15.00

15.00

SPK value SPK Ref Val %REC 96.4

LowLimit 64.4

64.4

HighLimit 0.301 117

**RPDLimit** 

20

Qualifiers:

Value exceeds Maximum Contaminant Level.

Value above quantitation range E

Analyte detected below quantitation limits

Sample pH greater than 2 P

Analyte detected in the associated Method Blank

RPD outside accepted recovery limits

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit

Page 2 of 2



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

# Sample Log-In Check List

Work Order Number: 1212290 Animas Environmental Client Name: Received by/date: Lindsay Mangin Logged By: 12/6/2012 10:02:35 AM Lindsay Mangin Completed By: 12/06/12 Reviewed By: Chain of Custody Not Present Yes !! No 1. Were seals intact? Yes V No Not Present 2. Is Chain of Custody complete? Courier How was the sample delivered? Log In Yes V No I NA! 4. Coolers are present? (see 19. for cooler specific information) Yes V No 1 NA i 5. Was an attempt made to cool the samples? NA : Yes V No 1 Were all samples received at a temperature of >0° C to 6.0°C Yes V No Sample(s) in proper container(s)? Yes V No 8. Sufficient sample volume for Indicated test(s)? Yes V No 9 Are samples (except VOA and ONG) properly preserved? NA Yes No V 10. Was preservative added to bottles? No VOA Vials ✓ Yes No 11. VOA vials have zero headspace? No ✓ Yes 12. Were any sample containers received broken? # of preserved Yes V No 13. Does paperwork match bottle labels? bottles checked for pH: (Note discrepancies on chain of custody) (<2 or >12 unless noted) Yes V No : 14. Are matrices correctly identified on Chain of Custody? Adjusted? Yes W No ! 15. Is it clear what analyses were requested? Yes Vi No 16. Were all holding times able to be met? Checked by: (If no, notify customer for authorization.) Special Handling (if applicable) Yes No NA V 17. Was client notified of all discrepancies with this order? Date: Person Notified: | eMail | Phone | Fax | In Person Via: By Whom: Regarding: Client Instructions: 18 Additional remarks:

19. Cooler Information

Cooler No Temp °C Condition Seal Intact Seal No Seal Date

Rush Same day  Rush 30-5 # 209A  4901 Hawkins NE - Albu Tel. 505-345-3975 Fi Anally	Opect Manager:  Selding Marison  Celding Marison  Marison		Seceived by:  Date Time Remarks: But to Conocc Phiblip's  Med!: \$3 30-5 #209A Supuran: Havy Dealer of the Time Inc. (10 3 36 75 2 have by: Rokkella have by: Area: 24 ho: 23 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Turn-Around Time:  Standard  Project Name:  (bp Salue)  Project #:	# 2 2 1 # #		Time: Relinquished by:  Received by:  Receiv
Shiranmula LC E Comanche	D Level 4 (Full Validation)  □ Level 4 (Full Validation)	Sari SC-I	Relinquished by:  Zelun Relinquished by:
Chain-of-Cuclient: Aprivates Leaves L	Phone #: '20'S email or Fax#: QA/QC Package: AStandard Accreditation Date Time	24.5-12 D94D	Date: Time: 145/2 1455 Date: Time: 2/



