Form C 144 State of New Mexico District I Revised June 6 2013 1625 N French Dr Hobbs NM 88240 **Energy Minerals and Natural Resources** For temporary pits below grade tanks and multi well fluid management pits submit to the appropriate NMOCD District Office District II Department 811 S First St Artesia, NM 88210 Oil Conservation Division District III 1000 RIO Brazos Road Aztec NM 87410 For permanent pits submit to the Santa Fe 1220 South St Francis Dr District IV Environmental Bureau office and provide a copy 1220 S St Francis Dr Santa Fe NM 87505 Santa Fe NM 87505 to the appropriate NMOCD District Office Pit. Below-Grade Tank, or 15816 Proposed Alternative Method Permit or Closure Plan Application OIL CONS DIV DIST 3 Below grade tank registration Type of action Permit of a pit or proposed alternative method JAN 1 2 2017 Closure of a pit below grade tank or proposed alternative method Modification to an existing permit/or registration Closure plan only submitted for an existing permitted or non permitted pit below grade tank or proposed alternative method Instructions Please submit one application (Form C 144) per individual pit below grade tank or alternative request Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water ground water or the environment Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules regulations or ordinances ConocoPhillips Company OGRID # 217817 Operator P O Box 4289, Farmington, New Mexico 87499 Address Facility or well name YEAGER COM 1 API Number 30 045 24015 OCD Permit Number U/L or Otr/Otr C Section 6 Township 30N Range 11W County San Juan Center of Proposed Design Latitude <u>36 845587</u> N Longitude <u>108 034986</u> W NAD 1927 🗖 1983 🛛 Surface Owner 🛛 Federal 🗌 State 🗌 Private 🗌 Tribal Trust or Indian Allotment **Pit** Subsection F G or J of 19 15 17 11 NMAC Temporary Drilling Workover Permanent Emergency Cavitation P&A Multi Well Fluid Management Low Chloride Drilling Fluid yes no Lined Unlined Liner type Thickness \_\_\_\_ mil LLDPE HDPE PVC Other \_\_\_\_ String Reinforced Liner Seams 🗍 Welded 🗋 Factory 🗋 Other Volume bbl Dimensions L x W x D 3 Below grade tank Subsection I of 19 15 17 11 NMAC Volume Max 120 bbl Type of fluid Produced Water Tank Construction material \_\_\_\_\_ Metal Secondary containment with leak detection X Visible sidewalls liner 6 inch lift and automatic overflow shut off Visible sidewalls and liner Visible sidewalls only Other Liner type Thickness 45 mil HDPE PVC Other LLDPE Alternative Method Submittal of an exception request is required Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval 5 Fencing Subsection D of 1915 1711 NMAC (Applies to permanent pits temporary pits and below grade tanks) Chain link, six feet in height two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence school hospital institution or church) Four foot height four strands of barbed wire evenly spaced between one and four feet Alternate Please specify <u>4 hog wire fence with a single strand of barbed wire on top</u>

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)

#### Signs 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

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 acceptable source material are provided below Siting criteria does not apply to drying pads or above grade tanks

<u>General siting</u>	
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 1WATERS 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 WATERS 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	🗌 Yes 🖾 No
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 application	🗌 Yes 🗌 No
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 WATERS 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	🗌 Yes 🗌 No
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
10 <b>Temporary Pits, Emergency Pits, and Below grade Tanks Permit Application Attachment Checklist</b> Subsection B of 19 15 17 9 NM         Instructions Each of the following items must be attached to the application. Please indicate by a check mark in the box, that the doct attached.            M 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 NMAC       M Siting Criteria Compliance Demonstrations based upon the appropriate requirements of 19 15 17 10 NMAC       M Design Plan based upon the appropriate requirements of 19 15 17 12 NMAC       M Operating and Maintenance Plan based upon the appropriate requirements of 19 15 17 12 NMAC       M Closure Plan (Please complete Boxes 14 through 18 if applicable) based upon the appropriate requirements of Subsection C of 19 1 and 19 15 17 13 NMAC       Previously Approved Design (attach copy of design) API Number or Permit Number       Or Permit Number       Or Permit Number       Or Permit Number       Or Permit Number       Or Permit Number       Or Permit Number       Or Permit Number       Or Permit Number       Or Permit Number       Or Permit Number       Or Permit Number       Or Permit Number       Or Permit Number       Or Permit Number       Or Permit Number	uments are NMAC 5 17 9 NMAC
11         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 doct attached. <ul> <li>Design Plan</li> <li>based upon the appropriate requirements of 19 15 17 11 NMAC</li> <li>Operating and Maintenance Plan</li> <li>based upon the appropriate requirements of 19 15 17 12 NMAC</li> <li>A List of wells with approved application for permit to drill associated with the pit</li> <li>Closure Plan (Please complete Boxes 14 through 18 if applicable)</li> <li>based upon the requirements of Paragraph (4) of Subsection B of 19 15 17 9 NMAC</li> <li>Hydrogeologic Data</li> <li>based upon the appropriate requirements of 19 15 17 10 NMAC</li> <li>Siting Criteria Compliance Demonstrations</li> <li>based upon the appropriate requirements of 19 15 17 10 NMAC</li> </ul> Previously Approved Design (attach copy of design)     API Number	15 17 9 NMAC

Permanent Pits Permit Application Checklist Subsection B of 1915 179 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		
<ul> <li>Climatological Factors Assessment</li> <li>Certified Engineering Design Plans based upon the appropriate requirements of 19 15 17 11 NMAC</li> <li>Dike Protection and Structural Integrity Design based upon the appropriate requirements of 19 15 17 11 NMAC</li> <li>Leak Detection Design based upon the appropriate requirements of 19 15 17 11 NMAC</li> <li>Liner Specifications and Compatibility Assessment based upon the appropriate requirements of 19 15 17 11 NMAC</li> <li>Quality Control/Quality Assurance Construction and Installation Plan</li> <li>Operating and Maintenance Plan based upon the appropriate requirements of 19 15 17 12 NMAC</li> <li>Freeboard and Overtopping Prevention Plan based upon the appropriate requirements of 19 15 17 11 NMAC</li> </ul>		
<ul> <li>Nuisance or Hazardous Odors including H<sub>2</sub>S Prevention Plan</li> <li>Emergency Response Plan</li> </ul>		
OII Field Waste Stream Characterization Monitoring and Inspection Plan		
<ul> <li>Erosion Control Plan</li> <li>Closure Plan based upon the appropriate requirements of Subsection C of 19 15 17 9 NMAC and 19 15 17 13 NMAC</li> </ul>		
<sup>13</sup> <u>Proposed Closure</u> 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 F		
Alternative Proposed Closure Method 🛛 Waste Excavation and Removal	0	
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		
14         Waste Excavation and Removal Closure Plan Checklist (19 15 17 13 NMAC) Instructions Each of the following items must be a second s		
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		
15 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 F 19 15 17 10 NMAC for guidance.		
Ground water 1s less than 25 feet below the bottom of the buried waste NM Office of the State Engineer 1WATERS 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 1WATERS 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 WATERS database search USGS Data obtained from nearby wells	□ Yes □ No □ NA	
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	🗌 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 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	🗌 Yes 🗍 No	
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	🗋 Yes 🗌 No	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance		
Form C 144 Oil Conservation Division Page 4 o	t 6	

adopted pursuant to NMSA 1978 Section 3 27 3 as amended 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
16 On Site Closure Plan Checklist (19 15 17 13 NMAC) Instructions Each of the following items must be attached to the closure pl by a check mark in the box, that the documents are attached.	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 believed and bel	lef
Name (Print) Crystal Walker Title Regulatory Coordinator	
Signature ystol Walker Date 1-10-2017	
e mail address <u>crystal walker@conocophillip com</u> Telephone <u>505_326_9837</u>	
18       OCD Approval       Permit Application (including closure plan)       Image: Condition (including closure plan)       Image: Condition (including closure plan)         OCD Representative Signature       Approval Date       Approval Date         Title       Falu (reasmenter)       OCD Permit Number	9/17
19	
<sup>19</sup> <u>Closure Report (required within 60 days of closure completion)</u> 19 15 17 13 NMAC Instructions Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.	
<b><u>Closure Report (required within 60 days of closure completion)</u> 19 15 17 13 NMAC Instructions Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities Please do not</b>	
<u>Closure Report (required within 60 days of closure completion)</u> 19 15 17 13 NMAC Instructions Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.	complete this
Closure Report (required within 60 days of closure completion)       19 15 17 13 NMAC         Instructions       Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting         The closure report is required to be submitted to the division within 60 days of the completion of the closure activities       Please do not         section of the form until an approved closure plan has been obtained and the closure activities have been completed.       Image: Closure Completion Date         20       Closure Method       Image: Closure Method       Image: Closure Method         If different from approved plan please explain       On Site Closure Method       Image: Closure Report Attachment Checklist         21       Closure Report Attachment Checklist       Instructions       Each of the following items must be attached to the closure report         21       Closure Report Attachment Checklist       Instructions       Each of the following items must be attached to the closure report	pop systems only)
Closure Report (required within 60 days of closure completion)       19 15 17 13 NMAC         Instructions       Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting         The closure report is required to be submitted to the division within 60 days of the completion of the closure activities       Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.         Closure Method       Closure Method       Closure Method         If different from approved plan please explain       Alternative Closure Method       Waste Removal (Closed log mathematication)         21       Closure Report Attachment Checklist Instructions Each of the following items must be attached to the closure report Please in mark in the box, that the documents are attached.       Proof of Closure Notice (required for on site closure for private land only)	oop systems only)
Closure Report (required within 60 days of closure completion)       19 15 17 13 NMAC         Instructions       Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting         The closure report is required to be submitted to the division within 60 days of the completion of the closure activities       Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.         Closure Method       Closure Method       Closure Method         If different from approved plan please explain       Alternative Closure Method       Waste Removal (Closed loging please explain)         Zi       Closure Report Attachment Checklist Instructions Each of the following items must be attached to the closure report Please in mark in the box, that the documents are attached.       Proof of Closure Notice (surface owner and division)         Proof of Deed Notice (required for on site closure for private land only)       Plot Plan (for on site closures and temporary pits)	pop systems only)
Closure Report (required within 60 days of closure completion)       19 15 17 13 NMAC         Instructions       Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting         The closure report is required to be submitted to the division within 60 days of the completion of the closure activities       Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.         Closure Method       Closure Method       Closure Method         If different from approved plan please explain       On Site Closure Method       Alternative Closure Method         21       Closure Report Attachment Checklist Instructions Each of the following items must be attached to the closure report Please in mark in the box, that the documents are attached.         Proof of Closure Notice (surface owner and division)       Proof of Deed Notice (required for on site closure for private land only)         Plot Plan (for on site closures and temporary pits)       Confirmation Sampling Analytical Results (if applicable)         Waste Material Sampling Analytical Results (required for on site closure)       Site closure)	oop systems only)
Closure Report (required within 60 days of closure completion)       19 15 17 13 NMAC         Instructions       Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting         The closure report is required to be submitted to the division within 60 days of the completion of the closure activities       Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.         Closure Method       Closure Completion Date	oop systems only)
Closure Report (required within 60 days of closure completion)       19 15 17 13 NMAC         Instructions       Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting         The closure report is required to be submitted to the division within 60 days of the completion of the closure activities and submitting         The closure report is required to be submitted to the division within 60 days of the completion of the closure activities Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.         Closure Method       Closure Completion Date         20       Closure Method       Alternative Closure Method       Waste Removal (Closed loging please explain)         21       Closure Report Attachment Checklist       Instructions       Each of the following items must be attached to the closure report       Please in mark in the box, that the documents are attached.         Proof of Closure Notice (required for on site closure for private land only)       Plot Plan (for on site closures and temporary pits)       Confirmation Sampling Analytical Results (if applicable)         Waste Material Sampling Analytical Results (required for on site closure)       Disposal Facility Name and Permit Number	pop systems only)

22 Operator Closure Certification
I hareby cetting that the information and attachments submi

I hereby certify that the information and attachments submitted with this closure report belief I also certify that the closure complies with all applicable closure requirements a	is true accurate and complete to the best of my knowledge and and conditions specified in the approved closure plan
Name (Print)	Title
Signature	Date
e mail address	Telephone

ConocoPhillips Company requests a variance for the items listed below The requested variance per 19 15 17 15 A provides equal or better protection of fresh water public health & the environment

- 1 <u>Fencing</u>
  - Fencing as described in Section 5 under Alternate COPC will construct all new fences around the below grade tank utilizing 48 steel mesh field fence (hog wire) on the bottom with a single strand of barbed wire on top T posts shall be installed every 12 feet and corners shall be anchored utilizing a secondary T post Below grade tanks will be fenced regardless of location

### 2 Geo membrane Liner

- The geo membrane liner consists of a 45 mil flexible LLDPE material manufactured by Brawler Industries LLC as SuperScrim H45 SuperScrim H45 is manufactured with LLDPE and is 45 mil inch thickness and is reinforced with polyester scrim. The geomembrane liner has a hydraulic conductivity of less than 5 X 10-14 cm/s and is resistant to ultraviolet light petroleum hydrocarbons salts and acidic and alkaline solutions. The manufacturer specific sheet is attached
- 3 COPC will notify Public Entity Surface Owners by email in lieu of certified mail Private Entity Surface Owners will still be notified via certified mail



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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file )	(R=POD f replaced O=orphan C=the file closed)	ed	••						E 3=SW argest)		3 UTM in 1	meter	s) (In fo	eet)	
		POD	(1							<b>C</b>					
POD Number <u>SJ 00135</u>	Code	Sub- basın	County <sub>SJ</sub>				Sec		<b>Rng</b> 11W	<b>X</b> 229764	ן 4079745		DepthWellDepthW 180		Water olumn 157
<u>SJ 00162</u>			SJ	3	1	4	07	30N	11W	229663	4079644	æ	58	23	35
<u>SJ 00183</u>			SJ		1	1	08	30N	11W	230601	4080532	-	360	300	60
<u>SJ 00220</u>			SJ	3	2	2	08	30N	11W	231695	4080392	0	60	36	24
<u>SJ 00228</u>			SJ	4	2	2	08	30N	11W	231895	4080392	8	67	38	29
<u>SJ 00249</u>			SJ	2	4	2	08	30N	11W	231879	4080189	<b>P</b>	46	30	16
<u>SJ 00259</u>			SJ		4	2	07	30N	11 <b>W</b>	230184	4080137	•••	25	12	13
<u>SJ 00329</u>			SJ	3	1	4	07	30N	11W	229663	4079644	ß	63	20	43
<u>SJ 00332</u>			SJ		2	2	08	30N	11 <b>W</b>	231796	4080493	0	52	34	18
<u>SJ 00358</u>			SJ	3	4	1	07	30N	11W	229289	4080055	( <sup>2</sup>	61	38	23
<u>SJ 00387</u>			SJ	3	4	1	07	30N	11W	229289	4080055	۲			
<u>SJ 00389</u>			SJ	3	4	1	07	30N	11W	229289	4080055		53		
<u>SJ 00397</u>			SJ	3	4	1	07	30N	11W	229289	4080055	۲	56	35	21
<u>SJ 00415</u>			SJ	3	4	1	07	30N	11W	229289	4080055	۹	53	40	13
<u>SJ 00601</u>			SJ	2	3	4	07	30N	11W	229844	4079443		40	22	18
<u>SJ 00604</u>			SJ	2	3	4	07	30N	11 <b>W</b>	229844	4079443	<b>P</b>	38	22	16
<u>SJ 00620</u>			SJ	3	1	4	07	30N	11W	229663	4079644	Ø	52	35	17
<u>SJ 00679</u>			SJ	3	1	4	07	30N	11W	229663	4079644	•	48	22	26
<u>SJ 00688</u>			SJ	3	4	1	07	30N	11W	229289	4080055	8	70	58	12
<u>SJ 00689</u>			SJ	3	4	1	07	30N	11W	229289	4080055	8	78	65	13
<u>SJ 00690</u>			SJ	3	4	1	07	30N	11W	229289	4080055		60		
<u>SJ 00739</u>			SJ	3	4	1	07	30N	11W	229289	4080055	9	70	58	12
<u>SJ 00748</u>			SJ	3	4	1	07	30N	11 <b>W</b>	229289	4080055	<b>.</b>	60	41	19
<u>SJ 00769</u>			SJ		1	4	07	30N	11 <b>W</b>	229764	4079745	<b>R</b>	50	14	36
<u>SJ 00806</u>			SJ	3	4	1	07	30N	11W	229289	4080055	e	38	20	18
<u>SJ 00882</u>			SJ	3	4	1	07	30N	11W	229289	4080055	2	60	50	10
<u>SJ 00889</u>			SJ	3	4	1	07	30N	11W	229289	4080055	8	55		
<u>SJ 00893</u>			SJ		2	4	07	30N	11W	230166	4079735	<b>\$</b>	80	40	40
<u>SJ 00918</u>			SJ	2	3	4	07	30N	11W	229844	4079443	48 <del>0</del>	35	14	21
<u>SJ 00919</u>			SJ	2	3	4	07	30N	11W	229844	4079443	•	35	12	23
<u>SJ 00920</u>			SJ	2	3	4	07	30N	11 <b>W</b>	229844	4079443	P	35	12	23
<u>SJ 00925</u>			SJ	2	1	4	08	30N	11W	231467	4079798		32	20	12
<u>SJ 01115</u>			SJ	4	2	2	08	30N	11W	231895	4080392	<u>.</u>	35	26	9

http://nmwrrs.ose.state.nm.us/nmwrrs/ReportProxy?queryData=%7B%22report%22%3A 1/10/2017

<u>SJ 01172</u>	SJ		2	3	07	30N	11W	229375	4079755		50	30	20
<u>SJ 01310</u>	SJ		3	3	07	30N	нw	228950	4079364	<b>\$</b>	80	50	30
<u>SJ 01368</u>	SJ		2	3	08	30N	11W	230968	4079711	4	59	39	20
<u>SJ 01404</u>	SJ		3	4	07	30N	11W	229745	4079344	<b>A</b>	40	15	25
<u>SJ 01406</u>	SJ		1	4	07	30N	11W	229764	4079745	<b>6</b> 2	45	12	33
<u>SJ 01425</u>	SJ		4	3	07	30N	11W	229361	4079353		55	25	30
<u>SJ 01451</u>	SJ		2	2	08	30N	11W	231796	4080493	<b>8</b>	64	34	30
<u>SJ 01468</u>	SJ		4	3	07	30N	11W	229361	4079353	<b>e</b>	60	25	35
<u>SJ 01475</u>	SJ	3	3	2	07	30N	11W	229682	4080046	9	49	27	22
<u>SJ 01484</u>	SJ		3	3	07	30N	11 <b>W</b>	228950	4079364	<b>(</b> )	61	10	51
<u>SJ 01492</u>	SJ			3	07	30N	11W	229151	4079565	-9	60	22	38
<u>SJ 01520</u>	SJ	2	: 1	4	08	30N	11W	231467	4079 <b>7</b> 98	<b>8</b>	58	18	40
<u>SJ 01567</u>	SJ	2	4	4	07	30N	11W	230247	4079431		35	14	21
<u>SJ 01570</u>	SJ		1	4	08	30N	11 <b>W</b>	231368	4079699		59	37	22
<u>SJ 01667</u>	SJ		3	4	07	30N	11W	229745	4079344	<b>(</b>	41	21	20
<u>SJ 01814</u>	SJ		2	2	08	30N	11W	231796	4080493	۴	52	10	42
<u>SJ 01968</u>	SJ		2	2	08	30N	11W	231796	4080493	6	40	25	15
<u>SJ 01999</u>	SJ		2	2	08	30N	11W	231796	4080493	<b>e</b>	61	45	16
<u>SJ 02005</u>	SJ	4	4	3	07	30N	11W	229460	4079252	<b>\$</b>	55	20	35
<u>SJ 02006</u>	SJ	2	4	3	07	30N	11W	229460	4079452	<b>6</b>	50	24	26
<u>SJ 02140</u>	SJ	1	1	1	07	30N	11W	228886	4080666	8	70	60	10
<u>SJ 02194</u>	SJ				07	30N	11W	229553	4079967		59	22	37
<u>SJ 02261</u>	SJ	2	3	4	08	30N	11W	231449	4079393	8			
<u>SJ 02293</u>	SJ	2	4	2	08	30N	11W	231879	4080189		50	35	15
<u>SJ 02331</u>	SJ	2	4	2	08	30N	11W	231879	4080189	<b>e</b>	53	35	18
<u>SJ 02413</u>	SJ	1	4	3	08	30N	11W	230850	4079406		40	31	9
<u>SJ 02485</u>	SJ	4	1	4	08	30N	11W	231467	4079598		49	30	19
<u>SJ 02715</u>	SJ	4	4	3	07	30N	11W	229460	4079252	<b>*</b>	68	20	48
<u>SJ 02906</u>	SJ	4	1	4	07	30N	11W	229863	4079644	6	45	24	21
<u>SJ 02915</u>	SJ	1	4	3	08	30N	11W	230850	4079406	<b>8</b>	45		
<u>SJ 02936</u>	SJ	1	1	4	07	30N	11W	229663	4079844	<b>e</b>	38	30	8
<u>SJ 03030</u>	SJ	2	4	2	08	30N	11W	231879	4080189		56	40	16
<u>SJ 03089</u>	SJ	4	2	3	08	30N	11W	231067	4079610	<b>e</b>	48	36	12
<u>SJ 03098</u>	SJ	2	2	2	08	30N	11W	231895	4080592	4	63	23	40
<u>SJ 03154</u>	SJ	4	1	1	08	30N	11W	230700	4080431	<b>*</b>	40		
<u>SJ 03199</u>	SJ	1	4	3	08	30N	11W	230850	4079406	<b>**</b>	40	20	20
<u>SJ 03202</u>	SJ	2	4	2	08	30N	11W	231879	4080189	<b>6</b>	45		
<u>SJ 03210</u>	LS	2	2	2	08	30N	11W	231895	4080592		60	30	30
<u>SJ 03240</u>	SJ	2	2	2	08	30N	11W	231895	4080592		50		
<u>SJ 03245</u>	SJ	4	4	4	06	30N	11W	230318	4080843	æ	80	65	15
<u>SJ 03267</u>	SJ	3	1	2	05	30N	11W	231359	4081993		83	60	23

http://nmwrrs.ose.state.nm.us/nmwrrs/ReportProxy?queryData=%7B%22report%22%3A 1/10/2017

<u>SJ 03914 POD1</u> <u>SJ 04048 POD1</u>	SJ SJ				2 3	07 07		11W 11W	229772 228774	4080131 4079213		140 52	65 4	75 48
<u>SJ 03794 POD1</u>	SJ				3	07		11W	228894	4079720		44	27	17
<u>SJ 03653</u>	SJ	4	1	2	2	08	30N	11W	231895	4080392	<b>6</b>	62	26	36
<u>SJ 03646</u>	SJ	2	L :	2	2	08	30N	11W	231895	4080392		61	24	37
<u>SJ 03642</u>	SJ	2	2	1	4	08	30N	11W	231467	4079798		58	32	26
<u>SJ 03639</u>	SJ	2	1:	2	2	08	30N	11W	231895	4080392	2	60	24	36
<u>SJ 03630</u>	SJ					07		11W	228849	4079263		68	24	44
<u>SJ 03484</u>	SJ					07		nw	229260	4079252		75		
<u>SJ 03480</u>	SJ		•		23	08		11W	231067	4079610	49 69	50		
<u>SJ 03431</u> SJ 03465	SJ SJ			4	2	08 07		11W 11W	230985 229882	4080115 4080046	8	50 80		
<u>SJ 03419</u>	SJ	2	2.		4	08		11W	231847	4079381	<b>6</b>	41	9	32
<u>SJ 03398</u>	SJ		1 :		2	08		11W	231695	4080592		80	20	60
<u>\$J 03381</u>	SJ	2	2 :	2	2	08		11W	231895	4080592	<b>8</b>	50		
<u>SJ 03378</u>	SJ	2	2	4	2	08	30N	11W	231879	4080189		50		
<u>SJ 03367</u>	SJ	4	ŀ	4	3	08	30N	11W	231050	4079206	8	29	5	24
<u>SJ 03313</u>	SJ	4	ı	1	4	08	30N	11W	231467	4079598		58	20	38
<u>SJ 03305</u>	SJ	2	2	4	2	08	30N	11W	231879	4080189	٩	50		
<u>SJ 03303</u>	SJ	2	2	4	2	08	30N	11W	231879	4080189	6	55	30	25
<u>SJ 03271</u>	SJ	2	2	3	2	07	30N	нw	229882	4080246				

Record Count 95

PLSS Search

Section(s) 5 8 Township 30N Range 11W

#### UTM locatio was d rived f m PLSS see H lp

The data furnished by the NMOSE/ISC and a secrepted by the rec p ent with the expressed understanding that the OSE/ISC make no warranties expressed or impled, concerning the uracy ompl t lability us bility suit bility f any part ular purp f the data.

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WATER COLUMN/ AVERAGE DEPTH TO WATER

		N	ew M	le)	cı	сс	<i>• C</i>	)ffi	ce o	of the	State	En	gineer		
	Wa	ter	Col	u	n	11	n/.	Â	ver	age	De	pth	n to W	ate	٢
(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file )	(R=POD) replaced O=orphan C=the file closed)	ned : 15	••					/ 2=NF est to la	E 3=SW urgest)		3 UTM ın n	neters)	(In	ı feet)	
		POD Sub		0	Q	0								u	/ater
POD Number	Code		County	-	-	-	Sec	Tws	Rng	Х	Y	De	pthWellDepth		
<u>SJ 00322</u>			SJ	1	4	4	12	30N	12W	228453	4079478	÷	66	40	26
<u>SJ 00384</u>			SJ	2	3	4	12	30N	12W	228258	4079493	<b>1</b>	57	20	37
<u>SJ 00643</u>			SJ		4	4	12	30N	12W	228554	4079379		75	51	24
<u>SJ 03020</u>			SJ	4	3	4	12	30N	12W	228258	4079293	<b>(</b>	52	30	22
<u>SJ 03027</u>			SJ	3	4	3	12	30N	12W	227663	4079309		100		
<u>SJ 03129</u>			SJ	2	4	3	12	30N	12W	227863	4079509	<b>8</b>	44	35	9
SJ 03757 POD1			SJ		4	4	12	30N	12W	228428	4079355		22	12	10
SJ 03917 POD1			SJ	2	4	4	12	30N	12W	228634	4079449		55	35	20
											Average De	pth to V	Vater	31 fee	t
											Мі	nımum l	Depth	12 fee	t
											Ma	kimum I	Depth	51 fee	t
Record Count 8															
PLSS Search															
Section(s) 1 12		Townsh	ip 30N		Ra	nge	12	N							

UTM locatio was derived f om PLSS see Help

The data furnish d by the NMOSE/ISC and accepted by the rec p ent with the xp ss d und standing that the OSE/ISC make warrant est express ed o implied, erring the a wracy completeness el ability usability or suitability for any part cular purpose of the data

1/10/17 1 37 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



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

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters)

No records found

PLSS Search

Section(s) 36 Township 31N Range 12W

The data s furnished by the NMOSE/ISC and is accepted by the rec p e t with the expressed understanding that the OSE/ISC make o warrant s xpr ssed o impled, o cerning the accuracy mpleten ss el b l ty usability o su tability f any particular purpo f the data

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WATER COLUMN/ AVERAGE DEPTH TO WATER

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file )	(R=POD replaced O=orphan C=the file closed)	ied	· ·						E 3=SW ugest)		3 UTM in mete	ers) (I	n feet)	
	,	POD												
		Sub	<b>.</b> .	-	Q	-	_	_	_					ater
POD Number	Code	basın	County	64	16 2		Sec 31	Tws		X	4092721 🛣	DepthWellDept	hWater Co 50	lum
<u>SJ 01811</u>			SJ		2	2	31	31N	ΠW	230320	4083731	89	50	-
<u>SJ 03937</u>			SJ	4	1	3	32	31N	11W	230722	4082828	67	52	
											Average Depth	to Water	51 fee	t
											Minim	um Depth	50 feet	t
											Maxim	um Depth	52 feet	t
Record Count 2														
PLSS Search														
Section(s) 31 32		Townsh	ıp 31N	]	Ran	ge	11\	v						

1/10/17 1 39 PM

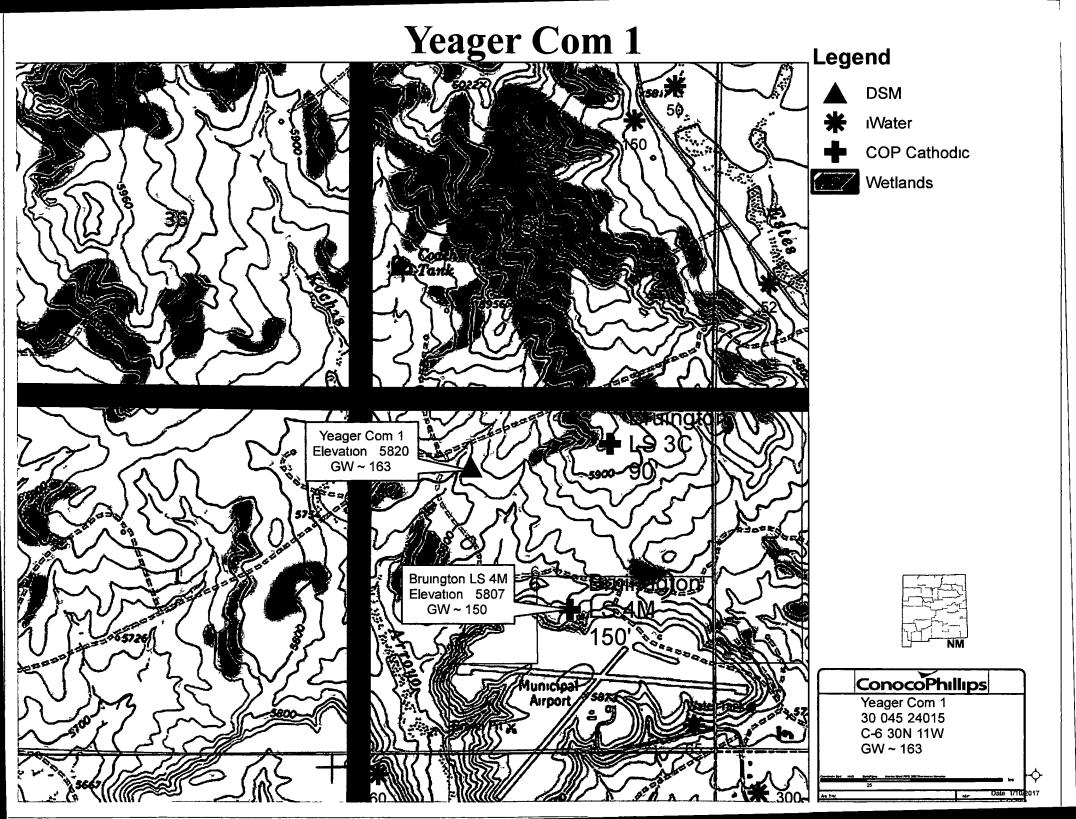
WATER COLUMN/ AVERAGE DEPTH TO WATER

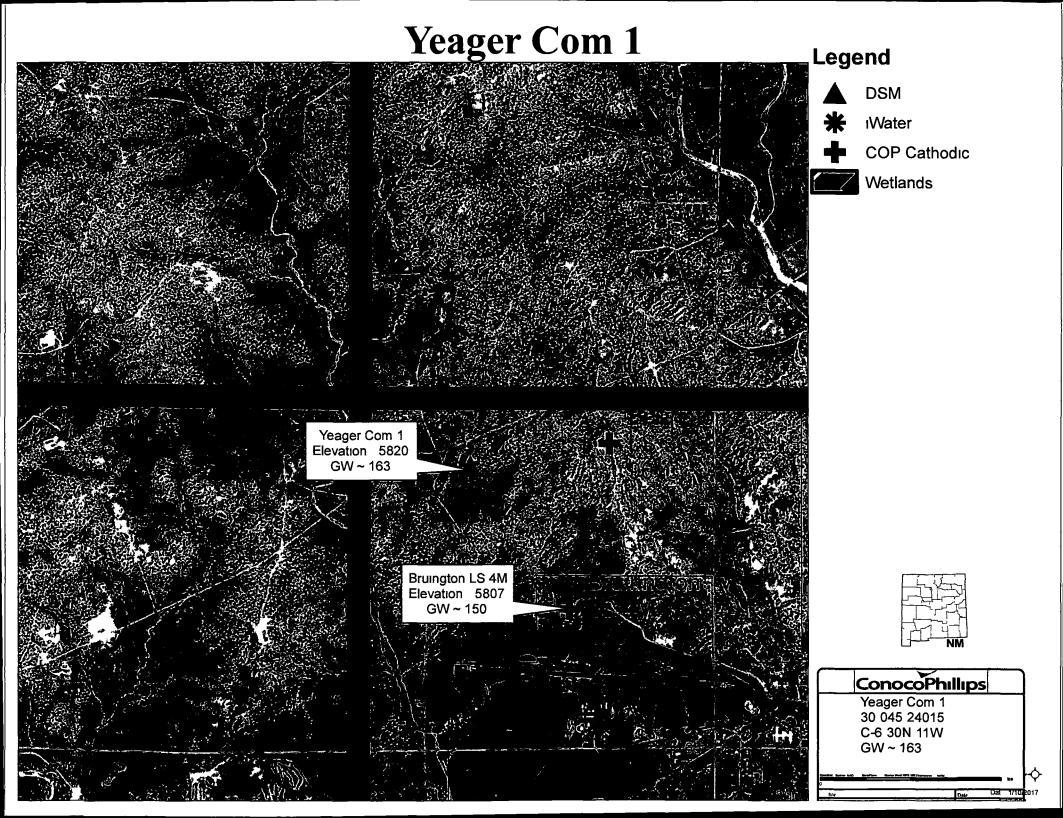
### TIERRA CORROSION CONTROL, INC DRILLING LOG

COMPANY Conoco Phillips LOCATION Bruington LS 4M STATE NM BIT SIZE 7 7/8 LBS COKE BACKFILL 2 600# ANODE TYPE 2 X 60 Duriron DATE April 18 2008 LEGALS S6 T30N R11W DRILLER Gilbert Peck CASING SIZE/TYPE 8 X 20 PVC VENT PIPE 300 ANODE AMOUNT 10

COUNTY San Juan DEPTH 300 COKE TYPE Asbury PERF PIPE 140 BOULDER DRILLING None

DEPTH	DRILLER S LOG	AMPS	DEPTH	DRILLER SLOG	AMPS	1	Γ				······
		AIVIPS						ANODE #	DEPTH	NO COKE	COKE
20	Casing	-	310					1	290	25	48
25	Sand		315					2	280	24	48
30		4	320					3	270	26	48
35		3	325					4	260	21	43
40		4	330					5	250	26	48
45		7	335					6	240	27	52
50		4	340				1	7	230	24	50
55		6	345					8	220	28	51
60	<u> </u>	7	350					9	210	30	58
65 70	Gray Shale	9	355					10	200	37	70
75		14	360 365					11			<u> </u>
80		19	370					12			
85	<u>├─</u> ──	19	375					13			
90	<u>-</u>	19	380					14			
95	Black Shale	23	385		-+			15			
100	1	23	390					16			
105		20	395					10		<u> </u>	<u>├</u> ───┤
110		22	400						<b></b> .	<b></b>	
115		26	405					18			
120		2 5	410					19			<u> </u>
125		26	415					20			
130		25	420					21			
135		22	425					22			
140		21	430					23			
145		19	435	· · · · · · · · · · · · · · · · · · ·				24			
150 155		23	440					25			
160		22	445 450					26			
165		21	450					27			
170	······	24	460					28			
175		23	465					29			
180		2 5	470					30			
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190		27	480			"	۳.				
195		29	485				<u> </u>				
200		37_	490							<u></u>	
205		_3 5	495					WATER DI			
210		30	500					SOLATIO			
215 220	~	29	<u> </u>					LOGING V			1
220	<u>├</u>	28	<u> </u>							<b>FO BATTER</b>	RY
225	┟──── <u></u>	20				ļ	•	TOTAL AM	IPS 201		
235	<u>├</u>	24		·		Į		TOTAL GB		NCE 59	
240		27		<b>  -</b> ···			[	REMARKS			
245	<u>├</u> ────	27									
250	<u> </u>	26	<u> </u>								
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# Below Grade Tank (BGT) Siting Criteria and Compliance Demonstrations

Well Name <u>Yeager Com 1</u>

- <u>Depth to groundwater (should not be less than 25 feet)</u>
   The nearest recorded well with available water depth information is the Bruington LS
   4M with groundwater @ 150' as indicated in the Cathodic Data Sheet attached The subject well is 13 more in elevation making depth to groundwater at 163
- 2 <u>Distance to watercourse (should not be within 100 feet of a continuously flowing</u> watercourse, other significant watercourse, lakebed, sinkhole, wetland or playa lake [measured from the ordinary high water mark])

Aerial map attached indicates that there are **no** lakebeds, sinkholes playa lakes or watercourses within 100 feet of the proposed Below Grade Tank

3 <u>Distance to springs or wells (should not be within 200 feet of a spring or a fresh water</u> well used for public or livestock consumption)

Aerial map attached indicates that the Below Grade Tank will **not** be within 200 feet of any recorded well or spring

# Hydrogeological Report for Yeager Com 1

# **Regional Geological context**

The Nacimiento Formation is of Paleocene age (Baltz, 1967 p 35) It crops out in a broad band inside the southern and western margins of the central basin and in a narrow band along the west face of the Nacimiento Uplift The Nacimiento is a nonresistant unit and typically erodes to low, rounded hills or forms badland topography

The Nacimiento Formation occurs in approximately only the southern two thirds of the San Juan Basin where it conformably overlies and intertongues with the Ojo Alamo Sandstone (Fassett 1974, p 229) The Nacimiento Formation grades laterally into the main part of the Animas Formation (Fassett and Hinds, 1971 p 34), thus, in this area the two formations occupy the same stratigraphic interval

Strata of the Nacimiento Formation were deposited in lakebeds in the central basin area with lesser deposition in stream channels (Brimhall 1973, p 201) In general the Nacimiento consists of drab interbedded black and gray shale with discontinuous, white medium to very coarse grained arkosic sandstone (Stone e al , 1983, p 30) Stone et al indicated that the formation may contain more sandstone than commonly reported because some investigators assume the slope forming strata in the unit area shales, whereas in many places the strata actually are poorly consolidated sandstones Total thickness of the Nacimiento Formation ranges from about 500 to 1,300 feet. The unit generally thickens from the basin margins toward the basin center (Steven et al , 1974) The sandstone deposits within the Nacimiento Formation are much thinner than the total thickness of the formation because their environment of deposition was localized stream channels (Brimhall, 1973 p 201) The thickness of the combined San Jose Animas and Nacimiento Formations ranges from 500 to more than 3 500 feet

# Hydraulic Properties

**Reported well yields for** 53 wells completed in either the Animas or Nacimiento Formations range from 2 to 90 gallons per minute and the median yield is 7 5 gallons per minute. The primary use of water from Nacimiento and Animas Formations is domestic and livestock supplies. There are no known aquifer tests for the Animas or Nacimiento Formations, but specific capacities reported for six wells range from 0 24 to 2 30 gallons per minute per foot of drawdown (Levings et al. 1990)

The Animas and Nacimiento Formations are in many ways hydrologically similar to the San Jose Formation because sands in both units produce approximately the same quantities of water However, the greater percentage of fine materials in the Animas and Nacimiento Formations may restrict downward vertical leakage to the Ojo Alamo Sandstone or Kirtland Shale. The poorly cemented fine material is highly erodible, forms a badland terrain, and supports only spotty vegetation. These conditions are more conductive to runoff than retention of precipitation.

# References

Baltz, E H 1967, Stratigraphy and regional tectonic implications of part of Upper Cretaceous rocks, east-central San Juan Basin New Mexico USGS Professional Paper

## 552 101 p

Brimhall, R M 1973, Ground-water hydrology of Tertiary rocks of the San Juan Basin, New Mexico in Fassett J E, ed Cretaceous and Tertiary rocks of the Southern Colorado Plateau Four Corners Geological Society Memoir, p 197 207 Fassett, J E 1974, Cretaceous and Tertiary rocks of the eastern San Juan Basin, New Mexico and Colorado, in Guidebook of Ghost Ranch, central-northern New Mexico New Mexico Geological Society 25th Field Conference p 225 230 Fassett, J E and Hinds J S 1971 Geology and fuel resources of the Fruitland Formation and Kirtland Shale of the San Juan Basin, New Mexico and Colorado USGS Professional Paper 676, 76 p Levings G W , Craigg, S d , Dam, W L , Kernodle, J M and Thorn C R , 1990 Hydrogeology of the San Jose, Nacimiento, and Animas Formations in the San Juan structural basin, New Mexico Colorado, Arizona, and Utah USGS Hydrologic Investigations Atlas HA-720-A, 2 sheets

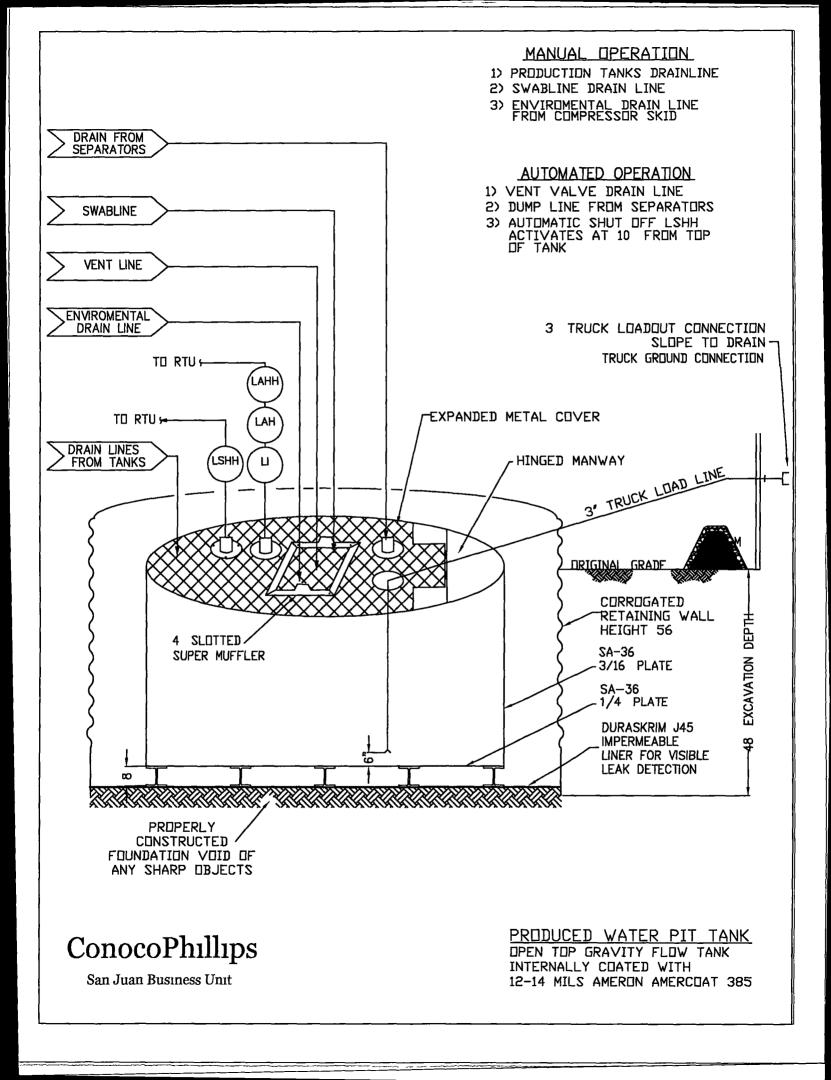
Stone, W J Lyford, F P, Frenzel, P F, Mızell N H, and Padgett, E T, 1983, Hydrogeology and water resources of San Juan Basın, New Mexico New Mexico Bureau of Mines and Mineral Resources, Hydrologic Report 6

#### Below Grade Tank Design and Construction

In accordance with NMAC 19 15 17 the following information describes the design and construction of below grade tanks on ConocoPhillips Company hereinafter known as COPC locations This is COPC s standard procedure for all below grade tanks (BGT) A separate plan will be submitted for any BGT which does not conform to this plan

#### General Plan

- 1 COPC will design and construct a properly sized and approved BGT which will contain liquids and should prevent contamination of fresh water to protect the public health and environment
- 2 COPC signage will comply with 19 15 17 11 C NMAC
- 3 COPC is requesting approval of an alternative fencing to be used on BGT tank locations COPC requests to utilize 48 steel mesh field fence (hog wire) on the bottom with a single strand of barbed wire on top T posts shall be installed every 12 feet and corners shall be anchored utilizing a secondary T post BGTs will be fenced regardless of location
  - a If the BGT is located within 1000 of an occupied permanent residence school hospital institution or church COPC will construct A 6 chain link fence with two strands of barbed wire on top The operator shall ensure that all gates associated with the fence are closed and locked when responsible personnel are not onsite
- 4 COPC will construct a screened expanded metal covering on the top of the BGT
- 5 COPC will ensure that a BGT is constructed of materials resistant to the BGT s particular contents and resistant to damage from sunlight as shown on design drawing and specification sheet
- 6 The COPC BGT system will have a properly constructed foundation consisting of a level base free of rocks debris sharp edges or irregularities to prevent punctures cracks or indentations of the liner or tank bottom as shown on design drawing
- 7 COPC shall operate and install the BGT to prevent the collection of surface water run on COPC has built in shut off devices that do not allow a BGT to overflow COPC constructs berms and corrugated retaining walls at least 6 above ground to keep from surface water run on entering the BGT as shown on the design plan
- 8 If COPC needs to modify/retrofit the existing BGT it will meet the below specifications
- 9 COPC will construct and use a BGT that does not have double walls The BGT s side walls will be open for visual inspection for leaks the BGT s bottom is elevated a minimum of six inches above the underlying ground surface and the BGT is underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected
- 10 COPC will equip below grade tanks with a properly functioning automatic high level shut off control device as well as manual controls to prevent overflows
- 11 COPC will utilize a geomembrane liner manufactured by Brawler Industries LLC as SuperScrim H45 SuperScrim H45 is manufactured with LLDPE and is 45 mil inch thickness and is reinforced with polyester scrim. The geomembrane liner has a hydraulic conductivity of less than 5 X 10<sup>14</sup> cm/s and is resistant to ultraviolet light petroleum hydrocarbons salts and acidic and alkaline solutions. The manufacturer specific sheet is attached.
- 12 The general specification for design and construction are attached





# SuperScrim™ H Product Specifications

	This product meets GRI GM 25 Specifications					
Properties	Test Method	Frequency	Minimu	in Average	e Values	
			<u>. H30</u>		7. HK5 - 1	
Thickness Nominal (mils) Min Ave (mils)	ASTM D5199	Per roll	30 27	36 32	45 40	
Weight Nominal (ib/1000 ft²) Min Ave (ib/1000 ft²)	ASTM D5261	Per roll	140 125	168 151	210 189	
Grab Tensile Strength (Ib) min ave Elongation (%) min ave	ASTM D7004 (each direction) (each direction)	30 000 lb	300 25	310 25	320 25	
Tongue Tear (Ib) min ave	ASTM D5884 (each direction)	30 000 lb	130	130	130	
Index Puncture (lb) min ave	ASTM D4833	30 000 lb	85	103	105	
Ply Adhesion (Ib) min ave (1)	ASTM D6636	30 000 lb	20	25	25	
Oxidative Induction Time (OIT) <sup>(2)</sup> (a) Standard OIT Or	ASTM D3895	Formulation	>100	>100	>100	
(b) High Pressure OIT	ASTM D5885		>1000	>1000	>1000	
	Sandardholl	Dimonalona				
Roll Width <sup>(3)</sup> ft			11 83	11 83	11 83	
Roll Length <sup>(3)</sup> ft	1500	1230	1000			
Roll Area ft <sup>2</sup>				14 551	11 830	

()Alternatively an acceptable ply adhesion is to have a film tearing bond occur within the sheet material <sup>(2)</sup>The Manufacturer has the option to select either one of the OIT methods listed to evaluate the

antioxidant effectiveness in the geomembrane.

(3)Roll widths and lengths have a tolerance of  $\pm 1\%$ 

Custom material thicknesses also available

This data is provided for i formatio al p rposes only Brawle 1 d stries LLC makes no warranties as to the suitability of the fitness for a specific use or merchantability of products referred to no guarantee of satisfactory results upon contained information or recommendations and disclaims all hability from resulting loss or damage. This information is subject to change without notice please check with Brawler Industries LLC for current updates

This is a preliminary data sheet based upon laboratory testing of initial manufacturing lots and may be changed without notice as additional product testing data becomes available.



MILES CITY MT 184 Hwy 59 N Milas City MT 59301 800 488.3592 406.234 1680 MIDLAND TX 11701 Co Rd 125 W Midland TX 79711 800.583.6005 432.553 4005



830 569 4005

HOUSTON, TX 8615 Golden Spike Ln Houston TX-77086 800 3647688 281 272 1660

SERIABLA ESPANIOL

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BRAWLER

Reinforced Geomembranes

Properties	Test Method	Minimum Average Values						
The stren the start		_ 9mil	12 mil	16 mil	20,711	24mil	301mill	
Weight	D5261	5 4 oz/yd <sup>2</sup>	5 7 oz/yd²	7 2 oz/yd <sup>2</sup>	9 6 oz/yd²	11 5 oz/yd <sup>2</sup>	13 4 oz/yd <sup>2</sup>	
Thickness		9 mil	12 mil	16 mil	20 mil	24 mil	30 mil	
Grab Tensile (lbs )	D751	MD 200 CD 135	MD 210 CD 176	MD 230 CD 210	MD 330 CD 286	MD 352 CD 300	MD 352 CD 300	
Mullen Burst	D6241	300 psi	350 psi	400 psi	600 psi	680 psi	780 psi	
Accelerated UV Weathering	D4355	>80% after 2000 hrs exposure	>90 / after 2000 hrs exposure	>90 / after 2000 hrs exposure	>90 % after 2000 hrs exposure	>90 // after 2000 hrs exposure	>90 / after 2000 hrs exposure	
Standard Roll Dimensions,								
Roll Length (2) Ft		3 000	3 000	4 000	3 000	2 250	2 250	
Roll Width <sup>(2)</sup> Ft		12	12	12	12	12	12	
Roll Area Ft <sup>2</sup>		36 000	36 000	48 000	36 000	27 000	27 000	

 $^{(1)}9$  of 10 views shall be Category 1 or 2. No more than 1 view from Category 3  $^{(2)}$  Roll widths and lengths have a tolerance of  $\pm$  1%

Custom material thicknesses also available

This data is provided for informational purposes only Brawler Industries LLC makes no warranties as to the suitability of the fitness for a specific use or merchantability of products referred to no guarantee of satisfactory results upon contained information or recommendations and disclaims all liability from resulting loss or damage This information is subject to change without notice please check with Brawler Industries LLC for current updates



MILES CITY MT 184 Hwy 59 N Miles City MT 59301 800 488 3592 406 234 1680 MIDLAND TX 11701 Co Rd 125 W Midland TX 79711 800 583 6005 432 563 4005 PLEASANTON, TX 4300 S Hwy 281 Pleasanton TX 78064 830 569 4005 HÔUSTON, TX & 8615 Gölden Špike Ln Houston TX 77086 800.364 7688 281.272.1660 ø

## SEHABLATESPANOL

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### ConocoPhillips Company San Juan Asset Below Grade Tank Maintenance and Operating Plan

In accordance with Rule 19 15 17 the following information describes the operation and maintenance of a below grade tank (BGT) on a Burlington Resources Oil & Gas Company LP (COP) location This is COP s standard procedure for all BGT s A separate plan will be submitted for any BGT which does not conform to this plan

## General Plan

- 1 COP will operator and maintain a BGT to contain liquids and solids and maintain the integrity of the liner liner system and secondary containment system to prevent contamination of fresh water and protect public health and the environmental COP will perform an inspection on a monthly basis install cathodic protection and automatic overflow shutoff devices as seen on the design plan
- 2 COP will not discharge into or store any hazardous waste in the BGT
- 3 COP shall operator and install the BGT to prevent the collection of surface water run on COP has built in shut off devices that do not all ow a BGT to overflow COP constructs berms and corrugated retained walls at least 6 above grade to keep surface water run on from entering the BGT as shown on the design plan
- 4 As per 19 15 17 12 D(3) COP will inspect the BGT for leakage and damage at least monthly The operator will document the integrity of each tank at least annually and maintain a written record for 5 years inspections may include 1) containment berms adequate and no oil present 2) tanks had no visible leaks or sign of corrosion 3) tank valves flanges and hatches had no visible leaks and 4) no evidence of significant spillage of produced liquids COP shall remove any visible or measurable layer of oil from the fluid surface of the BGT in an effort to prevent significant accumulation of oil overtime
- 5 COP shall maintain adequate freeboard to prevent overtopping of the BGT
- 6 If a BGT develops a leak then COP shall removal all liquid above the damage or leak within 48 hours of discovery notify the appropriate division office pursuant to 19 15 29 NMAC and repair the damage or replace BGT as applicable
- 7 If COP discovers a BGT designed in accordance with 19 15 17 11 I(5) has lost integrity the BGT will promptly be drained and removed from service and COP will follow the approved closure plan If COP discovers a retrofitted BGT designed in accordance with 19 15 17 11 I(4)(a c) does not demonstrate integrity or that the BGT develops any of the conditions identified in Paragraph (5) of Subsection A of 19 15 17 12 NMAC shall repair the damage or close the existing BGT pursuant to the closure requirements of 19 15 17 13 NMAC
- 8 If COP equips or retrofits the existing BGT to comply with Paragraphs (1) through (4) of Subsection I of 19 15 17 11 NMAC COP shall visually inspect the area beneath the BGT during the retrofit and document any areas that are wet discolored or showing other evidence of a release on form C 141 COP shall measure and report to the division the concentration of contaminants in the wet or discolored soil with respect to the standards set forth in Table I of 19 15 17 13 NMAC If there is no wet or discolored soil or if the concentration of contaminants in the wet or discolored soil is less than the standard set forth in Table I of 19 15 17 13 NMAC then COP will proceed with the closure requirements of 19 15 17 13 NMAC prior to initiating the retrofit or replacement

### ConocoPhillips Company San Juan Asset Production BGT Closure Plan

In accordance with Rule 19 15 17 13 NMAC the following plan describes the general closure requirements of a below grade tank (BGT) on any ConocoPhillips Company (COP) location in the San Juan Asset This is COP s standard closure procedure for all BGT s regulated under Rule 19 15 17 NMAC and operated by COP For those closures which do not conform to this standard closure plan a separate BGT specific closure plan will be developed and utilized

### Closure Conditions and Timing for BGT

- Within 60 days of cessation of operation COP will
  - o Remove all liquids and sludge and dispose in a division approved manner
- Within 72 hours or 1 week prior to closure COP will
  - Give notice to surface owners by certified mail For public entities by email as specified on the variance page
  - o Give notice to Division District Office verbal or in writing/email
- Within 6 months of cessation of operation COP will
  - o Remove BGT and dispose recycle reuse or reclaim in a division approved manner
  - o Remove unused onsite equipment associated with the BGT
- Within 60 days of closure COP will
  - Send the Division District Office a Closure Report per 19 15 17 13 F (1)

#### **General Plan Requirements**

- Prior to initiating any BGT closure except in the case of an emergency COP will notify the surface owner of the intent to close the BGT by certified mail no later than 72 hours or 1 week before closure and a copy of this notification will be included in the closure report In the case of an emergency the surface owner will be notified as soon as practical
- 2 Notice of closure will be given to the Division District office between 72 hours and 1 week of the scheduled closure via email or phone The notification of closure will include the following
  - a Operators Name
  - b Well Name and API Number
  - c Location
- 3 All liquids will be removed from the BGT following cessation of operation Produced water will be disposed of at one of COP s approved Salt Water Disposal facilities or at a Division District Office approved facility
- 4 Solids and sludge s will be shoveled and/or vacuumed out for disposal at one of the Division District Office approved facilities depending on the proximity of the BGT site Envirotech Land Farm (Permit #NM 01 011) Industrial Ecosystems Inc JFJ Land Farm (Permit #NM 01 0010B) and Basin Disposal (Permit #NM 01 005)
- 5 COP will obtain prior approval from the Division District Office to dispose recycle reuse or reclaim the BGT and provide documentation of the disposition of the BGT in the closure report. Steel materials will be recycled or reused as approved by the Division District Office. Fiberglass tanks will be empty cut up or shredded and EPA cleaned for disposal as solid waste. Liner materials will be cleaned without soils or contaminated material for disposal as solid waste. Fiberglass tanks and liner materials will meet the conditions of 19 15 35 NMAC Disposal will be at a licensed disposal facility presently San Juan County Landfill operated by Waste Management under NMED Permit SWM 052426
- 6 Any equipment associated with the BGT that is no longer required for some other purpose following the closure will be removed

Revised 3/15/2016

7 Following removal of the tank and any liner material COP will test the soils beneath the BGT as follows

- a At a minimum a five point composite sample will be taken to include any obvious stained or wet soils or any other evidence of contamination
- b The laboratory sample shall be analyzed for the constituents listed in Table I of 19 15 17 13

Table I							
Closure Criteria for Soils Beneath Below Grade Tanks Drying Pads Associated with Closed Loop Systems and Pits where Contents are Removed							
groundwater less than 10 000							
mg/l TDS							
	Chloride	EPA 300 0	600 mg/kg				
≤50 feet	ТРН	EPA SW 846 Method 418 1	100 mg/kg				
	BTEX	EPA SW 846 Method 8021B or 8260B	50 mg/kg				
	Benzene	EPA SW 846 Method 8021B or 8015M	10 mg/kg				
······································	Chioride	EPA 300 0	10 000 mg/kg				
51 feet 100 feet	ТРН	EPA SW 846 Method 418 1	2 500 mg/kg				
	GRO+DRO	EPA SW 846 Method 8015M	1 000 mg/kg				
-	BTEX	EPA SW 846 Method 8021B or 8260B	50 mg/kg				
F	Benzene	EPA SW 846 Method 8021B or 8015M	10 mg/kg				
> 100 feet	Chloride	EPA 300 0	20 000 mg/kg				
	ТРН	EPA SW 846 Method 418 1	2 500 mg/kg				
	GRO+DRO	EPA SW 846 Method 8015M	1 000 mg/kg				
	BTEX	EPA SW 846 Method 8021B or 8260B	50 mg/kg				
	Benzene	EPA SW 846 Method 8021B or 8015M	10 mg/kg				

\*Or other test methods approved by the division

\*\*Numerical limits or natural background level whichever is greater

(19 15 17 13 NMAC Ro 19 15 17 13 NMAC 3/28/2013)

- 8 If the Division District Office and/or COP determine there is a release COP will comply with 19 15 17 13 C 3b
- 9 Upon completion of the tank removal pursuant to 19 15 17 13 C 3c if all contaminant concentrations are less than or equal to the parameters listed in Table I of 19 15 17 13 NMAC the excavation will be backfilled with non waste containing earthen material compacted and covered with a minimum of one foot top soil or background thickness of top soil whichever is greater. The surface will then be re-contoured to match the native grade prevent ponding of water and prevent erosion of cover material.
- 10 For those portions of the former BGT area no longer required for production activities COP will seed the disturbed area in the first favorable growing season following the closure of the BGT Seeding will be accomplished via drilling on the contour whenever practical or by other Division District Office approved methods COP will notify the Division District Office when reclamation and re vegetation is complete

Reclamation of the BGT shall be considered complete when

- Established vegetative cover reflects a life form ratio of +/ 50% of pre disturbance levels
- Total plant cover is at least 70% of pre disturbance levels (Excluding noxious weeds) OR
- Pursuant to 19 15 17 13 H 5d COP will comply with obligations imposed by other applicable federal or tribal agencies in which there re vegetation and reclamation requirements provide equal or better protection of fresh water human health and the environment

Revised 3/15/2016

11 For those portions of the former BGT area required for production activities reseeding will be done at well abandonment and following the procedure noted above

#### **Closure Report**

All closure activities will include proper documentation and will be submitted to OCD within 60 days of the BGT closure on a Closure Report using Division District Office Form C 144 The Report will include the following

- Proof of Closure Notice (surface owner and Division District Office)
- Backfilling & cover installation
- Confirmation Sampling Analytical Results
- Application Rate & Seeding techniques
- Photo Documentation of Reclamation