| 25 N. French Dr., Hobbs, NM 88240  |   | Form C-14   |
|--|---|---|
| atriat II  | Energy Minerals and Natural Resources   |   |
| istrict II<br>01 W. Grand Ave., Artesia, NM 88210  | Department<br>Oil Conservation Division<br>1220 South St. Francis Dr.   | For temporary pits, closed-loop sytems, and below-grade<br>tanks, submit to the appropriate NMOCD District Office.  |
| <u>strict III</u><br>00 Rio Brazos Rd., Aztec, NM 87410<br>strict IV   | Santa Fe, NM 87505  | For permanent pits and exceptions submit to the Santa Fe<br>Environmental Bureau office and provide a copy to the   |
| 20 S. St. Francis Dr., Santa Fe, NM 87505  |   | appropriate NMOCD District Office.  |
|  | Pit, Closed-Loop System, Below-Grad   | de Tank, or   |
| Propo  | sed Alternative Method Permit or Closu  | re Plan Application   |
| Type of action:  | X Permit of a pit, closed-loop system, below-grade  | tank, or proposed alternative method  |
|  | Closure of a pit, closed-loop system, below-grad  | e tank, or proposed alternative method  |
|  | Modification to an existing permit  |   |
|  | Closure plan only submitted for an existing perm<br>below-grade tank, or proposed alternative metho   |   |
| Instructions, Planse submit one  | application (Form C-144) per individual pit, closed-la  |   |
| Please be advised that approval  | l of this request does not relieve the operator of liability should operations<br>elieve the operator of its responsibility to comply with any other applicab   | s result in pollution of surface water, ground water or the   |
| perator: ConocoPhillips Compa  | nv  | OGRID#: 217817  |
| ddress: PO Box 4289, Farming   |   |   |
| cility or well name: SAN JUAN  |   | and the second se |
| PI Number:   | 3004533307 OCD Permit Numb  | har   |
|  |   | the second se   |
|  | tion: 21 Township: 31N Range:   | 8W County: San Juan<br>107.6719°W NAD: X 1927 198:  |
| enter of Proposed Design: Latitu<br>urface Owner: Federal  | de: 36.88486°N Longitude:   |   |
|  |   |   |
|  | orkover   |   |
| Permanent Emergency Lined Unlined  | orkover<br>Cavitation P&A<br>Liner type: Thickness mil LLDPE<br>Factory Other Volume:   | HDPE         PVC         Other  |
| Permanent       Emergency         Lined       Unlined         String-Reinforced         Liner Seams:       Welded         Closed-loop System:       Subse         Type of Operation:       P&A         Drying Pad       Above Gro         Lined       Unlined  | Cavitation P&A<br>Liner type: Thickness mil LLDPE<br>Factory Other Volume:<br>extion H of 19.15.17.11 NMAC  | bbl Dimensions Lx Wx D  |
| Permanent Emergency<br>Lined Unlined I String-Reinforced Liner Seams: Welded   Closed-loop System: Subse Type of Operation: P&A Drying Pad Above Gre Lined Unlined Line  | Cavitation P&A<br>Liner type: Thickness mil LLDPE<br>Factory Other Volume:<br>ction H of 19.15.17.11 NMAC<br>Drilling a new well Workover or Drilling (Applies 1<br>notice of intent)<br>ound Steel Tanks Haul-off Bins Other<br>ner type: Thickness mil LLDPE<br>Factory Other<br>n I of 19.15.17.11 NMAC<br>bbl Type of fluid: Produced Water<br><u>Metal</u><br>detection X Visible sidewalls, liner, 6-inch lift and au<br>Visible sidewalls only Other | bbl Dimensions Lx Wx D<br>to activities which require prior approval of a permit or<br>HDPEPVDOther   |
| Permanent       Emergency         Lined       Unlined         String-Reinforced         Liner Seams:       Welded         Closed-loop System:       Subsection         Type of Operation:       P&A         Drying Pad       Above Growthing         Lined       Unlined         Liner Seams:       Welded         Welded       Image: Subsection         Volume:       120         Tank Construction material:       Secondary containment with leak         Visible sidewalls and liner       Visible sidewalls and liner  | Cavitation       P&A         Liner type:       Thickness       mil       LLDPE         Factory       Other       Volume:  | bbl Dimensions Lx Wx D<br>to activities which require prior approval of a permit or<br>HDPEPVDOther   |
| Permanent       Emergency         Lined       Unlined         String-Reinforced         Liner Seams:       Welded         Closed-loop System:       Subsection         Type of Operation:       P&A         Drying Pad       Above Growthing         Lined       Unlined         Liner Seams:       Welded         Drying Pad       Above Growthing         Lined       Unlined         Liner Seams:       Welded         X       Below-grade tank:       Subsection         Volume:       120         Tank Construction material:       Secondary containment with leak         Visible sidewalls and liner       Liner Type:         Thickness | Cavitation       P&A         Liner type:       Thickness       mil       LLDPE         Factory       Other       Volume:  | bbl Dimensions Lx Wx D<br>to activities which require prior approval of a permit or<br>HDPEPVDOther<br>tomatic overflow shut-off<br>Unspecified   |

| Carding: Subsection O of 91.51.71.11 MMCC (Applies to permanent pit, temporary pits, and below-grade tands)     Chan link, sis fort in height, two strands of babed wire at top (Regarded (Facurd within 1000 fort of a permanent readence, school, hospital, institution or elevel)     Chan link, sis fort in height, two strands of babed wire cerely spaced between one and fore fore     Chan link, sis fort in height, two strands of babed wire eventy spaced between one and fore fore     Chan link, sis fort in height, two strands babed wire.     Chan link, sis forthe height, two strands babed wire wire the link strands babed wi |   |                  |          |
|---|---|------------------|----------|
| Bit Charles from straight, from strands of barbox speech devices one and from free         Autername       Place speech         Procession       Place speech         P   |   |                  |          |
| Bit Charles from straight, from strands of barbox speech devices one and from free         Autername       Place speech         Procession       Place speech         P   | Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, haspital, ins   | stitution or chu | (rch)    |
| Sharma:       Please specify <u>4' heg wire freedug topped with two streads harbed wire.</u> ?       Witting:       Scheering:       Scheeeeee:       Scheeee: <td< td=""><td></td><td></td><td></td></td<>   |   |                  |          |
| 7       Metrics:       Subsection E of 1915.17.11 NMAC (Applics to permanent pits and permanent oper top tanks)         2       Servers       Netting:       Other         3       Servers       Metricity inspections (If netting or screening is not physically feasible)         8       Servers       Servers       Servers         3       Servers       Servers       Servers         3       Servers       Servers       Servers         3       Servers       Servers       Servers         3       Servers       Servers       Servers         4       Multistrative Approvalue and Executions         3       Administrative approvalue: Requests must be submitted to the appropriate division district of the Santa FE Environmental Bureau office for consideration of approval.         10       Sting Criteria (regarding permitting: 19.15.17.10 NMAC         2       Description(1): Requests must be submitted to the Santa FE Environmental Bureau office for consideration of approval.         10       Sting Criteria (regarding permitting: 19.15.17.10 NMAC         2       Description(2): Requests must be submitted to the Santa FE Environmental Bureau office for consideration of approval.         10       Sting Criteria (regarding dub regards tools: Agenesis on adve regards tools: Agenesis on adve regards tools: Santa FE Environmental Bureau Office for adve santa regarding dub regards tools: Santa  |   |                  |          |
| Second       Other         B       Second       Consideration         B       Second       Second       Second         B       Second       Second       Second       Second         B       Second       <   |   |                  |          |
| Second       Other         B       Second       Consideration         B       Second       Second       Second         B       Second       Second       Second       Second         B       Second       <   |   |                  |          |
| <ul> <li>Monthly lupcicliums (if memory as vareaning is an physically fourthly)             </li> <li>Signer: Subsection C of 19,1517.11 NMAC</li></ul>   |   |                  |          |
| 8   |   |                  |          |
| □ 1 <sup>2</sup> × 2 × 2 * 1 ettering, providing Operator's name, site location, and emergency telephone numbers         Stepned in compliance with 19.15.1.03 NMAC         9         Administrative Ancrevals and Exception:   | Monthly inspections (If netting or screening is not physically feasible)  |                  |          |
| □ 1 <sup>2</sup> × 2 × 2 * 1 ettering, providing Operator's name, site location, and emergency telephone numbers         Stepned in compliance with 19.15.1.03 NMAC         9         Administrative Ancrevals and Exception:   | 8   |                  |          |
| Signed in compliance with 19.15.103 NMAC         9         Administrative Approvals and Excerctions         Particular in the intervention of equivalency are required. Please refer to 19.15.17 NMAC for guidance.         Provide the intervention of equivalency are required. Please refer to 19.15.17 NMAC for guidance.         Particular intervention equivalency are required. Please refer to 19.15.17 NMAC for guidance.         Particular intervention equivalency are required. Please refer to 19.15.17 NMAC for guidance.         9       Singer Criteria (recurreling nermitting): 19.15.17.10 NMAC         10       Singer Criteria (recurreling nermitting): 19.15.17.10 NMAC         11       Singer Criteria (recurreling nermitting): 19.15.17.10 NMAC         12       Singer Criteria (recurreling nermitting): 19.15.17.10 NMAC         13       Administrative approval.         14       Singer Criteria (recurreling nermitting): 19.15.17.10 NMAC         15       Singer Criteria (recurreling nermitting): 19.15.17.10 NMAC for guidance. Sitting criteria device of the state singer criteria below in the application. Eccommendations of acceptable approval.         15       Singer Criteria (recurreling nermitting): 19.15.17.10 NMAC for guidance.         16       Singer Criteria (recurreling nermitting): 19.15.17.10 NMAC for guidance.         17       Singer Criteria (recurreling nermitting): 19.15.17.10 NMAC for guidance.         17       Singer Criteria (recurreling nervet  | Signs: Subsection C of 19.15.17.11 NMAC   |                  |          |
| 9         9           9         Andmixtrative Approvals and Ecceptions           Juditications and dord demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.           Please check a bax if one or more of the following is requested, if not leave blank:           □         Administrative approval(s): Requests must be submitted to the appropriate division district of the Santa FE Environmental Bureau office for consideration of approval.           10         Exception(s): Requests must be submitted to the Santa FE Environmental Bureau office for consideration of approval.           10         Stime Criteria (researching permitting): 19.15.17.10 NMAC Intravelopies to estable some more during fifthe or bars. Regimmer grade as establing estimates in approximates in any require administrative approxal from the some during fifthe or bars. Regimmer approximate that the applications. Recommendations of acceptable some of approxel. Applications for expansion must attech burghtending for expansion. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying path or above grade-tanks associated with a cload-loog system.           Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or bolow grade tank.         . Yes S No           . Topographic may: Visual inspection (certification) of the proposed site:         . No           Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.         . No           . Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  | 12" X 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers  |                  |          |
| Justifications and/or demonstrations of equivalency are required. [Please refer to 19.15.17 NMAC for guidance.         Prime check a box if one or more of the following is requested. (If not leave blank:         Administrative approval.         Exception(s): Requests must be submitted to the appropriate division district of the Santa FE Environmental Bureau office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau Office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau Office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau Office for consideration of approval.         Image: the submitted to the santa FE Environmental Bureau Office for consideration of approval.         Image: the submitted to the santa FE Environmental Bureau Office for consideration of approval.         Image: the submitted to the santa FE environmental Bureau Office for consideration of approval.         Image: the submitted to the santa Sterie to approprise divita district of t   | X Signed in compliance with 19.15.3.103 NMAC  |                  |          |
| Justifications and/or demonstrations of equivalency are required. [Please refer to 19.15.17 NMAC for guidance.         Prime check a box if one or more of the following is requested. (If not leave blank:         Administrative approval.         Exception(s): Requests must be submitted to the appropriate division district of the Santa FE Environmental Bureau office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau Office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau Office for consideration of approval.         Image: the submitted to the Santa FE Environmental Bureau Office for consideration of approval.         Image: the submitted to the santa FE Environmental Bureau Office for consideration of approval.         Image: the submitted to the santa FE Environmental Bureau Office for consideration of approval.         Image: the submitted to the santa FE environmental Bureau Office for consideration of approval.         Image: the submitted to the santa Sterie to approprise divita district of t   | 9   |                  |          |
| Please check a bas if one or more of the following is requested, if not leave balant:   |   |                  |          |
| Administrative approval(s): Requests must be submitted to the appropriate division district of the Santa FE Environmental Bureau office for consideration of approval.         Constructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provide below. Request regarding changes to certain siting criteria more quire administrative approval from the application are acception which must be submitted to the Santa FE Environmental Bureau Office for consideration of approval.         Image: Construction: The application must demonstrate compliance for each siting criteria more quire administrative approval from the application. Recommendations of acceptable approval. Application must are submitted to the Santa FE Environmental Bureau Office for consideration of approval.         Image: Construction: The application must demonstrate compliance for each siting criteria more quire administrative approval from the state Engineer - WATERS database search; USGS; Data obtained from nearby wells       □ 'Yes SNo         Image: Construction of the temporary pit, permanent pit, or below-grade tank.       □ 'Yes SNo         Image: Construction of the proposed site;       □ Yes SNo         Image: Construction of the proposed site;       □ 'Yes SNo         Image: Construction of the proposed site; Aerial photo; Satellite image       □ 'Yes SNo         Image: Construction of the proposed site; Aerial photo; Satellite image       □ 'Yes SNo         Image: Construction of the state Engineer - WATERS database search; Visual inspection (certification) of the proposed site; Aerial photo; Satellite image       □ 'Yes SNo   | Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.   |                  |          |
| (Pencing/BGT Liner)             [Baception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.             [Baception(s): Requests must demonstrate compliance for each siting criteria may require deministrative approval from the application. Recommendations of acceptable source material are provide blocks. Request required may freque the submitted to the Santa Fe Environmental Bureau Office for consideration of approval. Application must demonstrate compliance for each siting criteria may require deministrative approval from the application of approval. Application must demonstrate compliance for each siting criteria may require deministrative approval from the consideration of approval. Application must attem builtication for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria and require the set set set apply to drying pads or above grade-tanks associated with a closed-loop system.             Ground water is less than 50 fest below the bottom of the temporary pit, permanent pit, or below-grade tank.           Sum of the state Engineer - iWATERS database search; USGS; Data obtained from nearby wells             Within 300 fest of a continuosyl flowing water course, or 200 fest of any other watercourse, lakebed, sinkhole, or playa         Less (Sum           Sum o             Opparaphic map; Visual inspection (certification) of the proposed site; Aerial photo; Satellite image           NA             Visual inspection (certification) of the proposed site; Aerial photo; Satellite image             Within 300 fest of a private, domestic fresh water well or spring, in exist  | Please check a box if one or more of the following is requested, if not leave blank:  |                  |          |
| 10         10         11         12         12         13         14         15         16         16         16         16         15  |   | sideration of a  | pproval. |
| Siting Criteria (regarding permitting): 19.15.17.10 NMAC         Instructions: The application mist domonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provide follow. Request regarding changes to certain siting criteria and require administrative approval from the application are stated to below. Request regarding changes to certain siting criteria may require administrative approval. For subcommendal Bureau Office for consideration are provide follow. Request regarding changes to certain siting criteria below in the source Fee to 19.157.10 NMAC for guidance. Sting criteria does not apply to drying pads or above grade tanks associated with a closed-loop system.          \[             \Science Sting criteria does not apply to drying pads or above grade tanks associated with a closed-loop system.          \[             \Science Sting criteria does not apply to drying pads or above grade tanks associated with a closed-loop system.          \[             \Science Sting criteria does not apply to drying pads or above grade tanks associated with a closed-loop system.          \[             \Science Sting criteria does not apply to drying pads or above grade tanks.   | 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 application mist domonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provide follow. Request regarding changes to certain siting criteria and require administrative approval from the application are stated to below. Request regarding changes to certain siting criteria may require administrative approval. For subcommendal Bureau Office for consideration are provide follow. Request regarding changes to certain siting criteria below in the source Fee to 19.157.10 NMAC for guidance. Sting criteria does not apply to drying pads or above grade tanks associated with a closed-loop system.          \[             \Science Sting criteria does not apply to drying pads or above grade tanks associated with a closed-loop system.          \[             \Science Sting criteria does not apply to drying pads or above grade tanks associated with a closed-loop system.          \[             \Science Sting criteria does not apply to drying pads or above grade tanks associated with a closed-loop system.          \[             \Science Sting criteria does not apply to drying pads or above grade tanks.   |   | T                |          |
| source material are provided below. Requests regarding changes to certain stilling criteria may require administrative approval from the opproval. Applicent must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Stilling criteria des not apply to drying pads or above grade-tanks associated with a closed-loop system.  | Siting Criteria (regarding permitting): 19.15.17.10 NMAC  |                  |          |
| Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.       . NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the<br>appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau Office for<br>consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria | ÷.,              |          |
| 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.       Image: Comparing the proposed site; Aerial photo; Satellite image         (Applies to temporary, emergency, or cavitation pits and below-grade tanks)       Image: Comparing the proposed site; Aerial photo; Satellite image         Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.       Image: Comparing the permanent residence, school, hospital, institution, or church in existence at the time of initial application.         (Applied to permanent pits)       • Visual inspection (certification) of the proposed site; Aerial photo; Satellite image         Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.       Image: Yes       X No         • NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.       Image: Yes       X No         Within 500 horizontal feet of a within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended       Image: Yes       X No         • Written confirmation or verification map; Topographic map; Visual inspection (certification) of the proposed sit  | Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  | Yes              | XNo      |
| application.       (Applies to temporary, emergency, or cavitation pits and below-grade tanks)       \NA         · Visual inspection (certification) of the proposed site; Aerial photo; Satellite image       \NA         Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.       \Pes       \No         (Applied to permanent pits)       · Visual inspection (certification) of the proposed site; Aerial photo; Satellite image       \Pes       \No         Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.       \Pes       \No         . NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.       \Pes       \No         . Written confirmation or verification from the municipality; Written approval obtained from the municipality       \Pes       \XiNo         . Written confirmation or verification map; Topographic map; Visual inspection (certification) of the proposed site       \Pes       \XiNo         Within soo feet of a wethand.       . US Fish and Wildlife Wethand Identification map; Topographic map; Visual inspection (certification) of the proposed site       \Pes       \XiNo         Within a unstable area.       . Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division       \P  | lake (measured from the ordinary high-water mark).  | Yes              | XNo      |
| (Applies to temporary, emergency, or cavitation pits and below-grade tanks)       NA         • Visual inspection (certification) of the proposed site; Aerial photo; Satellite image       NA         Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.       Yes         (Applied to permanent pits)       NA         • Visual inspection (certification) of the proposed site; Aerial photo; Satellite image       NA         Within 500 horizonal feet of a private, domestic fresh water well or spring, in existence at the time of initial application.       Yes       No         • NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.       Yes       No         • Within incorporated municipal boundaries or within a defined municipal fresh water well of spring, in existence at the time of initial application.       Yes       No         • NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.       Yes       Xio         • Within incorporated municipal boundaries or within a defined municipal fresh water well of spring.       • Yes       Xio         • Written confirmation or verification from the municipality; Written approval obtained from the municipality       Yes       Xio         Within 500 feet of a wetland.       • Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division       Yes       No </td <td></td> <td>Yes</td> <td>XNo</td>  |   | Yes              | XNo      |
| <ul> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>(Applied to permanent pits)         <ul> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> <li>Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.</li> <li>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</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> <li>Written confirmation or verification map; Topographic map; Visual inspection (certification) of the proposed site</li> <li>Yes XiNo</li> <li>Yes XiNo</li> <li>Yes XiNo</li> </ul> </li> <li>Within the area overlying a subsurface mine.</li> <li>Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division</li> <li>Yes XiNo</li> <li>Yes XiNo</li> <li>Yes XiNo</li> </ul>  |   |                  |          |
| Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.       Image: Ima                                    |   |                  | 31       |
| (Applied to permanent pits)       Image: Since of the proposed site; Aerial photo; Satellite image         Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.       Image: Since of the State Engineer - iWATERS database search; 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 adopted pursuant to NMSA 1978, Section 3-27-3, as amended       Image: Yes       Image: Y   |   |                  |          |
| <ul> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> <li>Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.</li> <li>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</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> <li>Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division</li> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological</li> </ul>   |   |                  | UNO      |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.       Image: Content of Con                                    |   | XNA              | 1.0      |
| purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. <ul> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.</li> <li>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</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> <li>Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division</li> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological</li> </ul> <ul> <li>Yes</li> <li>Yes</li> <li>No</li> </ul>  |   | -                | -        |
| 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 <pre></pre>   |   | Yes              | XNo      |
| adopted pursuant to NMSA 1978, Section 3-27-3, as amended       Image: Comparison of the properties of the propertie                                    | - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.  |                  | 1.1      |
| Within 500 feet of a wetland.   | adopted pursuant to NMSA 1978, Section 3-27-3, as amended   | Yes              | XNo      |
| Within the area overlying a subsurface mine.       Image: Yes       X No         • Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division       Image: Yes       X No         Within an unstable area.       Image: Provide the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological       Image: Yes       X No  | Within 500 feet of a wetland.   | Yes              | XNo      |
| Within an unstable area.         - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological   | Within the area overlying a subsurface mine.  | Yes              | XNo      |
| - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological  |   |                  | IV N     |
| overery, reposinguine map   | - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological  | Yes              | X No     |
| Within a 100-year floodplain - FEMA map Yes XNo   | Within a 100-year floodplain  | Yes              | XNo      |

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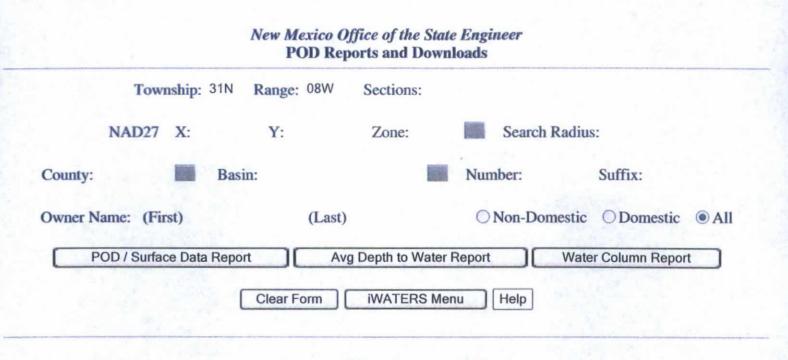
|  | ency Pits and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC<br>lowing items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.   |
|--|---|
| _  | ort (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC   |
|  | a (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9   |
|  | pliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  |
|  | I upon the appropriate requirements of 19.15.17.11 NMAC   |
| 8  |   |
|  | ntenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC   |
|  | e complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of<br>and 19.15.17.13 NMAC   |
| Previously Approved D  | Design (attach copy of design) API or Permit  |
|  | mit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC<br>lowing items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.<br>ogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9<br>upliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC<br>d upon the appropriate requirements of 19.15.17.11 NMAC<br>intenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC<br>e complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9<br>(7.13 NMAC<br>besign (attach copy of design) API |
| Previously Approved O  | perating and Maintenance Plan API   |
| Instructions: Each of the fol<br>Hydrogeologic Repo<br>Siting Criteria Com<br>Climatological Facts<br>Certified Engineerin<br>Dike Protection and<br>Leak Detection Des<br>Liner Specifications<br>Quality Control/Qua<br>Operating and Main<br>Freeboard and Over<br>Nuisance or Hazard<br>Emergency Respons<br>Oil Field Waste Stre<br>Monitoring and Insp<br>Erosion Control Plan | ng Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC<br>I Structural Integrity Design: based upon the appropriate requirements of 19.15.17.11 NMAC<br>ign - based upon the appropriate requirements of 19.15.17.11 NMAC<br>and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC<br>ality Assurance Construction and Installation Plan<br>intenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC<br>rtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC<br>lous Odors, including H2S, Prevention Plan<br>se Plan<br>earn Characterization<br>pection Plan  |
| 14   |   |
| Proposed Closure: 19.15  |   |
|  | te the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.  |
| Type: Drilling Wo  | orkover Emergency Cavitation P&A Permanent Pit X Below-grade Tank Closed-loop System  |
| Alternative  |   |
| Proposed Closure Method:   | X Waste Excavation and Removal (Below-Grade Tank)   |
|  | Waste Removal (Closed-loop systems only)  |
|  | On-site Closure Method (only for temporary pits and closed-loop systems)  |
|  | In-place Burial On-site Trench  |
| A REPORT   | Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)  |
| 15   |   |
|  | emoval Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan.<br>mark in the box, that the documents are attached.  |
|  | dures - based upon the appropriate requirements of 19.15.17.13 NMAC   |
| X Protocols and Procee   |   |
|  | ting Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC   |
| X Confirmation Sampl   |   |
| X Confirmation Sampl<br>X Disposal Facility Na   | ame and Permit Number (for liquids, drilling fluids and drill cuttings)   |
| <ul> <li>X Confirmation Sample</li> <li>X Disposal Facility Na</li> <li>X Soil Backfill and Co</li> </ul>  | ame and Permit Number (for liquids, drilling fluids and drill cuttings)<br>wer Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  |
| X Confirmation Sampl<br>X Disposal Facility Na<br>X Soil Backfill and Co<br>X Re-vegetation Plan -   | ame and Permit Number (for liquids, drilling fluids and drill cuttings)   |

| 16   |  |                           |
|--|--|---------------------------|
| <u>Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Ste</u><br>Instructions: Please identify the facility or facilities for the disposal of liquids, drilling<br>are required.  | el Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)<br>g fluids and drill cuttings. Use attachment if more than two               | facilities                |
| Disposal Facility Name:  | Disposal Facility Permit #:  |                           |
| Disposal Facility Name:  | Disposal Facility Permit #:  |                           |
| Will any of the proposed closed-loop system operations and associated activitie<br>Yes (If yes, please provide the information No  |  |                           |
| Required for impacted areas which will not be used for future service and operations:     Soil Backfill and Cover Design Specification - based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Plan - based upon the appropriate requirements of Plan - based upon the appropriat            | ate requirements of Subsection H of 19.15.17.13 NMA<br>ction I of 19.15.17.13 NMAC   | AC                        |
| <sup>17</sup><br><u>Siting Criteria (Regarding on-site closure methods only:</u> 19.15.17.10 NMA<br>Instructions: Each siting criteria requires a demonstration of compliance in the closure plan.<br>certain siting criteria may require administrative approval from the appropriate district office<br>for consideration of approval. Justifications and/or demonstrations of equivalency are require   | Recommendations of acceptable source material are provided bel<br>or may be considered an exception which must be submitted to the |                           |
| Ground water is less than 50 feet below the bottom of the buried waste.  |  | Yes No                    |
| - NM Office of the State Engineer - iWATERS database search; USGS: Data obta   | ained from nearby wells  | N/A                       |
| Ground water is between 50 and 100 feet below the bottom of the buried waste   | 74   | Yes No                    |
| <ul> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obta</li> </ul>   |  |                           |
| - Hit Office of the State Englisher - Hit PERS database search, 0505, Data offic   | and non nearby weas  |                           |
| Ground water is more than 100 feet below the bottom of the buried waste.   |  | Yes No                    |
| <ul> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obta</li> </ul>   | ined from nearby wells   | N/A                       |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signific (measured from the ordinary high-water mark).   | cant watercourse or lakebed, sinkhole, or playa lake   | Yes No                    |
| - Topographic map; Visual inspection (certification) of the proposed site  |  |                           |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in  | Yes No   |                           |
| - Visual inspection (certification) of the proposed site; Aerial photo; satellite image  |  |                           |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less the<br>purposes, or within 1000 horizontal fee of any other fresh water well or spring, in exist<br>- NM Office of the State Engineer - iWATERS database; Visual inspection (certified  | tence at the time of the initial application.<br>cation) of the proposed site  |                           |
| <ul> <li>Within incorporated municipal boundaries or within a defined municipal fresh water w<br/>pursuant to NMSA 1978, Section 3-27-3, as amended.</li> <li>Written confirmation or verification from the municipality; Written approval obtication of the section of the sect</li></ul> |  | Yes No                    |
| Within 500 feet of a wetland   | aned from the municipality   |                           |
| <ul> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual insp</li> </ul>  | pection (certification) of the proposed site   |                           |
| Within the area overlying a subsurface mine.   | Salar and the second   |                           |
| - Written confiramtion or verification or map from the NM EMNRD-Mining and N   | Mineral Division   |                           |
| Within an unstable area.   |  | Yes No                    |
| - Engineering measures incorporated into the design; NM Bureau of Geology & M  | ineral Resources: USGS; NM Geological Society;   |                           |
| Topographic map<br>Within a 100-year floodplain.<br>- FEMA map   |  | Yes No                    |
|  |  |                           |
| <sup>18</sup><br><u>On-Site Closure Plan Checklist:</u> (19.15.17.13 NMAC) Instructions: Each<br>by a check mark in the box, that the documents are attached.  | of the following items must bee attached to the closur   | re plan. Please indicate, |
| Siting Criteria Compliance Demonstrations - based upon the appropriate   | e requirements of 19.15.17.10 NMAC   | and the second second     |
| Proof of Surface Owner Notice - based upon the appropriate requirement   | nts of Subsection F of 19.15.17.13 NMAC  |                           |
| Construction/Design Plan of Burial Trench (if applicable) based upon th  | he appropriate requirements of 19.15.17.11 NMAC  | 1 Frank Prairie           |
| Construction/Design Plan of Temporary Pit (for in place burial of a dryi   | ng pad) - based upon the appropriate requirements of 1   | 9.15.17.11 NMAC           |
| Protocols and Procedures - based upon the appropriate requirements of  |  |                           |
| Confirmation Sampling Plan (if applicable) - based upon the appropriate  |  | 1 Street of               |
| Waste Material Sampling Plan - based upon the appropriate requirement  |  |                           |
| Disposal Facility Name and Permit Number (for liquids, drilling fluids a   |  | nnot be achieved)         |
| Soil Cover Design - based upon the appropriate requirements of Subsect   |  | and the define fed)       |
| Re-vegetation Plan - based upon the appropriate requirements of Subsect  |  |                           |
| a construction and outer appropriate requirements of Subsec  |  |                           |

| 19   |                                     |  |
|--|-------------------------------------|--|
| Operator Application Certification:  |                                     |  |
| I hereby certify that the information submitted with this application is true, accu  |                                     |  |
| Name (Print): Crystal Tafoya   | Title:                              | Regulatory Technician  |
| e-mail address: crystal.tatoya@conocophillips.com  |                                     | 12/22/2008   |
| e-mail address:crystal.tatoya@conocophillips.com   | Telephone:                          | 505-326-9837   |
| 20   |                                     |  |
| OCD Approval: Permit Application (including closure plan)  | Closure Plan (only)                 | OCD Conditions (see attachment)  |
| OCD Representative Signature:  |                                     | Approval Date:   |
| Title:   | OCD Peri                            | nit Number:  |
| 21   |                                     | the second second  |
| Closure Report (required within 60 days of closure completion): Subs<br>Instructions: Operators are required to obtain an approved closure plan prior to |                                     |  |
| report is required to be submitted to the division within 60 days of the completion  | on of the closure activitie         |  |
| approved closure plan has been obtained and the closure activities have been co  |                                     |  |
|  | Closury                             | e Completion Date:   |
| 22   |                                     |  |
| Closure Method:  |                                     |  |
| Waste Excavation and Removal On-site Closure Method  | Alternative Closure                 | Method Waste Removal (Closed-loop systems only)  |
|  |                                     |  |
| 23<br>Closure Report Regarding Waste Removal Closure For Closed-loop Systems   | s That Utilize Above G              | ound Steel Tanks or Haul-off Bins Only:  |
| Instructions: Please identify the facility or facilities for where the liquids, drill  |                                     |  |
| were utilized.   | Diseased Facility                   | Dennik Munikan   |
| Disposal Facility Name:<br>Disposal Facility Name:   |                                     | Permit Number:   |
| Were the closed-loop system operations and associated activities performed of  |                                     |  |
| Yes (If yes, please demonstrate complilane to the items below)   |                                     | to a used for findre service and operations?   |
| Required for impacted areas which will not be used for future service and op   | erations:                           |  |
| Site Reclamation (Photo Documentation)   |                                     |  |
| Soil Backfilling and Cover Installation  |                                     |  |
| Re-vegetation Application Rates and Seeding Technique  |                                     |  |
| 24<br>Classes Banart Attachment Chaddlist, Jastrustian, Eask of the fell   | and any literature second for anti- | shad to the element of the shade has a back much in  |
| <u>Closure Report Attachment Checklist:</u> Instructions: Each of the follo<br>the box, that the documents are attached.                                 | owing tems must be alla             | ched to the closure report. Please indicate, by a check mark in  |
| Proof of Closure Notice (surface owner and division)   |                                     |  |
| Proof of Deed Notice (required for on-site closure)  |                                     |  |
| Plot Plan (for on-site closures and temporary pits)  |                                     |  |
| Confirmation Sampling Analytical Results (if applicable)   |                                     |  |
| Waste Material Sampling Analytical Results (if applicable)   |                                     |  |
| Disposal Facility Name and Permit Number   |                                     |  |
| Soil Backfilling and Cover Installation  |                                     |  |
| Re-vegetation Application Rates and Seeding Technique  |                                     |  |
| Site Reclamation (Photo Documentation)<br>On-site Closure Location: Latitude:  | I an in the                         |  |
| On-site Closure Location: Latitude:  | Longitude:                          | NAD 1927 1983  |
| 25   | 1                                   |  |
| Operator Closure Certification:  |                                     |  |
| I hereby certify that the information and attachments submitted with this closure  |                                     |  |
| the closure complies with all applicable closure requirements and conditions spe   | ecified in the approved c           | osure plan.  |
| Name (Print):  | Title:                              | and the second |
| Signature:   | Date:                               | Stranger and Stranger  |
|  | Date:                               |  |
| e-mail address:  | Telephone:                          |  |
|  |                                     |  |

**Oil Conservation Division** 

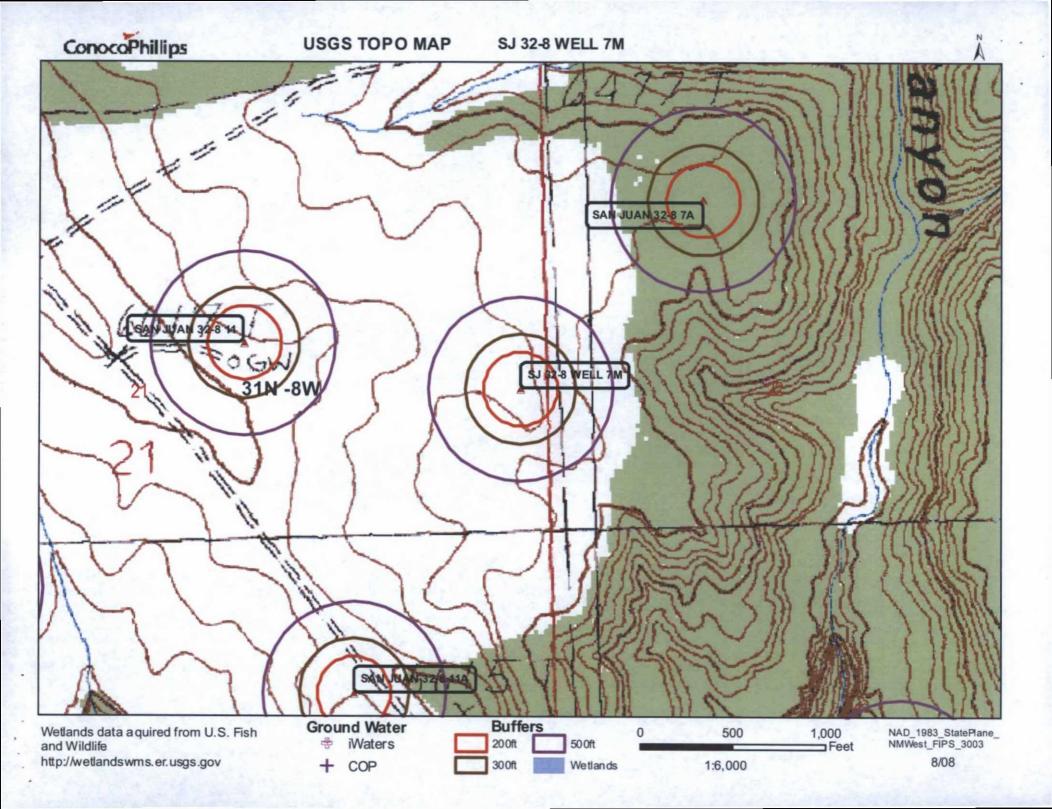
### New Mexico Office of the State Engineer



WATER COLUMN REPORT 08/20/2008

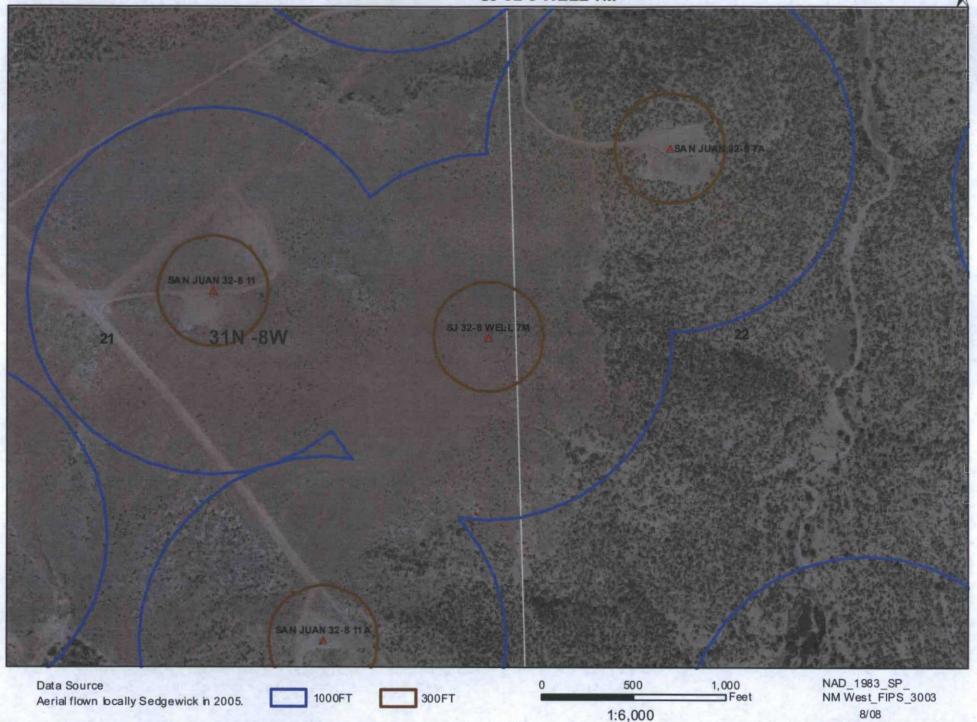
|            |     |     |     |   |   |   | 3=SW 4=SE<br>smallest |   |   | Depth | Depth | Water  | (in | feet) |
|------------|-----|-----|-----|---|---|---|-----------------------|---|---|-------|-------|--------|-----|-------|
| POD Number | Tws | Rng | Sec | q | g | g | Zone                  | х | Y | Well  | Water | Column |     |       |
| SJ 01167   | 31N | 08W | 24  | 4 | 4 | 3 |                       |   |   | 465   | 390   | 75     |     |       |
| SJ 03306   | 31N | 08W | 25  | 1 | 4 | 4 |                       |   |   | 600   | 500   | 100    |     |       |
| SJ 01822   | 31N | 08W | 25  | 2 | 2 | 2 |                       |   |   | 550   | 500   | 50     |     |       |
| SJ 00012   | 31N | 08W | 30  | 2 |   |   |                       |   |   | 1021  | 475   | 546    |     |       |
| SJ 00198   | 31N | 08W | 32  | 3 | 3 | 4 |                       |   |   | 2003  |       |        |     |       |

Record Count: 5



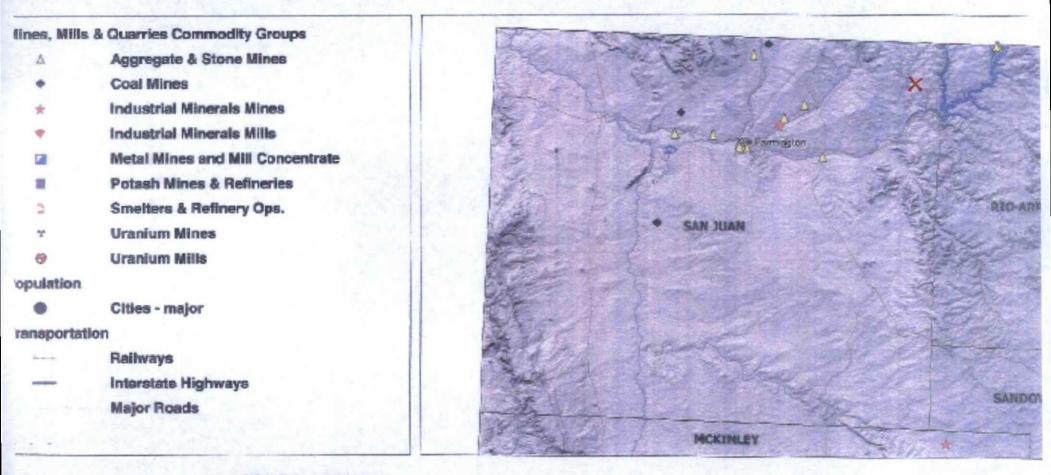
ConocoPhillips

# AERIAL MAP SJ 32-8 WELL 7M

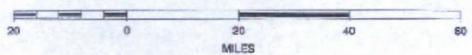


# Mines, Mills and Quarries Web Map

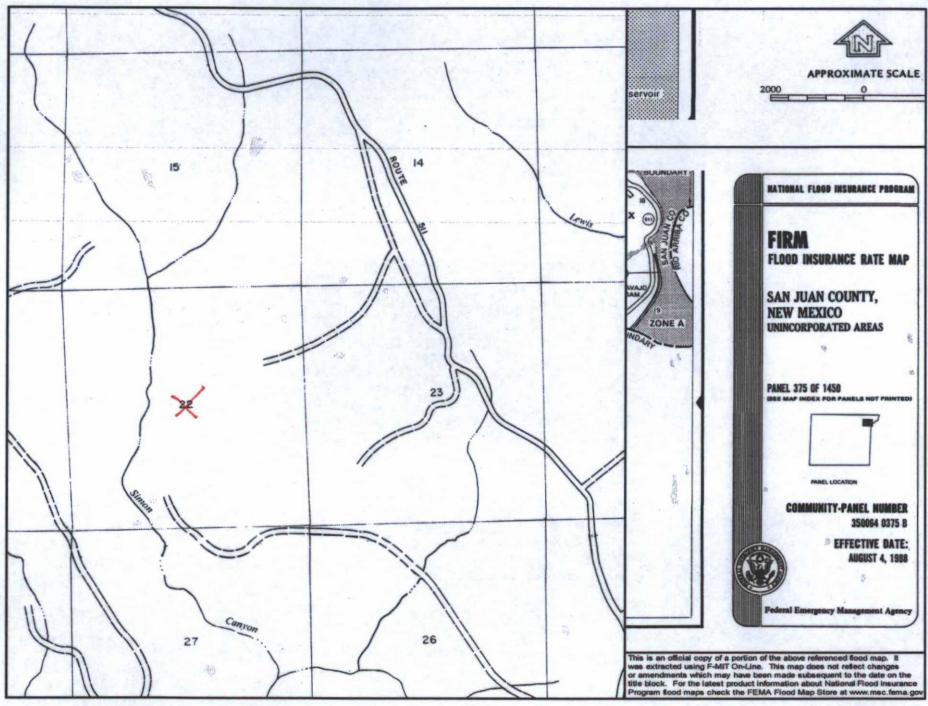
Unit Letter: , Section: 22, Town: 31N, Range: 8W







San Juan 32.8 Well 7M



#### SAN JUAN 32-8 UNIT 7M

#### Site Specific Hydrogeology

A visual site inspection confirming the information contained herein was performed on the well SAN JUAN 32-8 UNIT 7M, which is located at 36.88485 degrees North latitude and 107.6719 degrees West longitude. This location is located on the Anastacio Spring 7.5' USGS topographic quadrangle. This location is in section 21 of Township 31 North Range 8 West of the Public Land Survey System (New Mexico Principal Meridian). This location is located in San Juan County, New Mexico. The nearest town is Turley, located 11.1 miles to the southwest. The nearest large town (population greater than 10,000) is Durango, located 29.3 miles to the north (National Atlas). The nearest highway is State Highway 511, located 1.5 miles to the east. The location is on Private land and is 107 feet from the edge of the parcel as notated in the BLM land status layer updated January 2008. This location is in the Upper San Juan. Colorado. New Mexico, Subbasin. This location is located 1987 meters or 6517 feet above sea level and receives 14.5 inches of rain each year. The vegetation at this location is classified as Inter-Mountain Basins Big Sagebrush Shrubland as per the Southwest Regional Gap Analysis Program.

The estimated depth to ground water at this point is 242 feet. This estimation is based on the data published on the New Mexico Engineer's iWaters Database website and water depth data from ConocoPhillips' Cathodic wells. Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached. The nearest stream is 1,668 feet to the north and is classified by the USGS as an intermittent stream. The nearest perrenial stream is 3,471 feet to the northeast. The nearest water body is 3,467 feet to the northeast. It is classified by the USGS as an intermittent lake and is 0.5 acres in size. The nearest spring is 11,318 feet to the west. All stream, river, water body and spring information was determined as per the USGS Hydrographic Dataset (High Resolution), downloaded 3/2008. The nearest water well is 2,954 feet to the north. The nearest wetland is a 0.6 acre other located 3,448 feet to the northeast. The slope at this location is 1 degree to the southeast as calculated from USGS 30M National Elevation Dataset. This information is also discerned from the aerial and topographic map included. The surface geology at this location is SAN JOSE FORMATION -- Siltstone, shale, and sandstone with a Sandstone dominated formations of all ages substrate. The soil at this location is 'Travessilla-Weska-Rock outcrop complex, moderately steep' and is well drained and not hydric with severe erosion potential as taken from the NRCS SSURGO map unit, downloaded January 2008. The nearest underground mine is 13.4 miles to the northwest as indicated on the Mines, Mills and Quarries Map of New Mexico provided.

#### Regional Hydrogeological context:

The San Jose Formation of Eocene age occurs in New Mexico and Colorado, and its outcrop forms the land surface over much of the eastern half of the central basin. It overlies the Nacimiento Formation in the area generally south of the Colorado-New Mexico State line and overlies the Animas Formation in the area generally north of the State line. The San Jose Formation was deposited in various fluvial-type environments. In general, the unit consists of an interbedded sequence of sandstone, siltstone, and variegated shale. Thickness of the San Jose Formation generally increases from west to east (200 feet in the west and south to almost 2,700 feet in the center of the structural basin). Ground water is associated with alluvial and fluvial sandstone aquifers. Thus, the occurrence of ground water is mainly controlled by the distribution of sandstone in the formation. The distribution of such sandstone is the result of original depositional extent plus any post-depositional modifications, namely erosion and structural deformation. Transmissivity data for San Jose Formation are minimal. Values of 40 and 120 feet squared per day were determined from two aquifer tests (Stone et al, 1983, table 5). The reported or measured discharge from 46 water wells completed in San Jose Formation ranges from 0.15 to 61 gallons per minute and the median is 5 gallons per minute. Most of the wells provide water for livestock and domestic use. The San Jose Formation is a very suitable unit for recharge from precipitation because soils that form on the unit are sandy and highly permeable and therefore readily adsorb precipitation. However, low annual precipitation, relatively high transpiration and evaporation rates, and deep dissection of the San Jose Formation by the San Juan River and its tributaries all tend to reduce the effective recharge to the unit.

Stone et al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico: Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p.

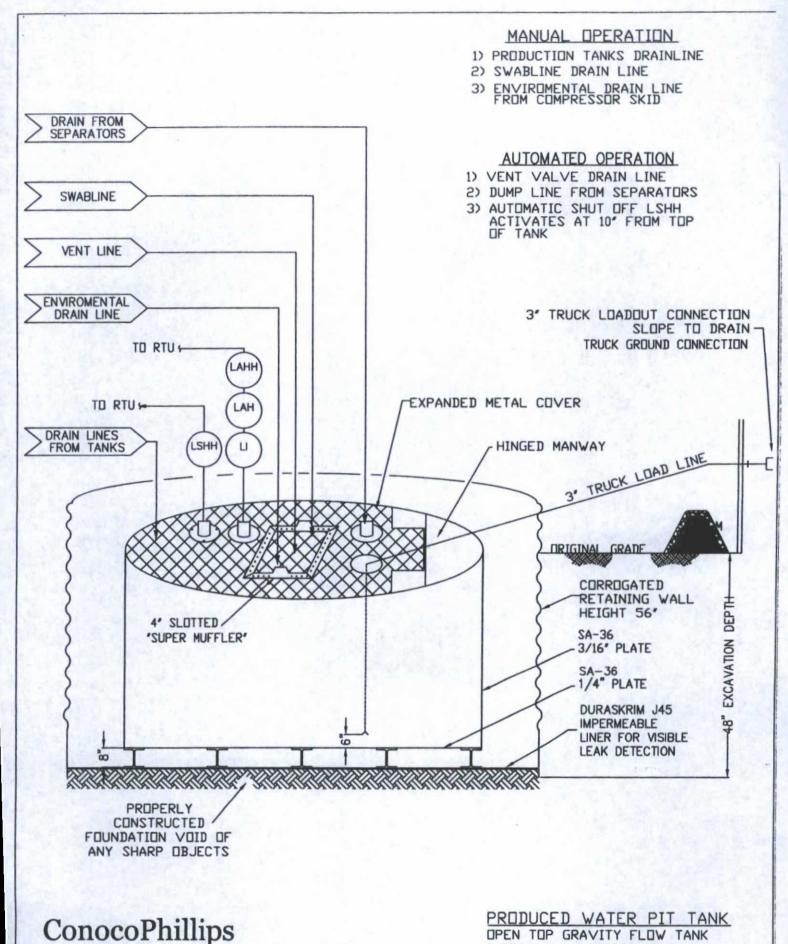
#### ConocoPhillips Company San Juan Basin Below Grade Tank Design and Construction

In accordance with NMAC 19.15.17 the following information describes the design and construction of below grade tanks on ConocoPhillips Company (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:

- 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.
- COPC signage will comply with 19.15.3.103 NMAC when COPC is the operator. If COPC is not the operator it will comply with 19.15.17.11NMAC. COPC includes Emergency Contact information on all signage.
- 3. COPC has approval to use alternative fencing that provides better protection. COPC constructs fencing around the BGT using 4 foot hog wire fencing topped with two strands of barbed wire, or with a pipe top rail. A six foot chain link fence topped with three strands of barbed wire will be use if the well location is within 1000 feet of permanent residence, school, hospital, institution or church. COPC ensures that all gates associated with the fence are closed and locked when responsible personnel are not onsite.
- COPC will construct a screened, expanded metal covering, on the top of the BGT.
- COPC shall ensure that a below-grade tank is constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight as shown on design drawing and specification sheet.
- 6. The COPC below-grade tank system shall 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 below-grade tank to prevent the collection of surface water run-on. COPC has built in shut off devices that do not allow a below-grade tank to overflow. COPC constructs berms and corrugated retaining walls at least 6" above ground to keep from surface water run-on entering the below grade tank as shown on the design plan.
- 8. COPC will construct and use a below-grade tank that does not have double walls. The below-grade tank's side walls will be open for visual inspection for leaks, the below-grade tank's bottom is elevated a minimum of six inches above the underlying ground surface and the below-grade tank is underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected.

- 9. COPC has equipped the below-grade tanks with the ability to detect high level in the tank and provide alarm notification and shutdown process streams into the tank. Once high level is detected RTU logic closes the inlet separator sales valve and does not permit vent valve to open. This shutdown of the sales valve and gagging of the vent valves prevents any hydrocarbon process streams from entering the pit tank once a high level is detected. Furthermore, an electronic page is sent to the COPC MSO for that well site and to the designated contract "Water-Hauling" Company indicating a high level and that action must be taken to address this alarm. The environmental drain line from COPC's compressor skid under normal operating conditions is in the open position. The environmental drain line is in place to capture any collected rain water or spilled lubricants from our compressor skids. The swab drain line is a manually operated drain and by normal operating procedures is in the closed position. The tank drain line is also a manually operated drain and during normal operations it is in the closed position.
- 10. The geomembrane liner consists of a 45-mil flexible LLDPE material manufactured by Raven Industries as J45BB. This product is a four layer reinforced laminated containing no adhesives. The outer layers consist of a high strength polyethylene film manufactured using virgin grade resins and stabilizers for UV resistance in exposed applications. The J45BB is reinforced with 1300 denier (minimum) tri-directional scrim reinforcement. It exceeds ASTMD3083 standard by 10%. J45BB has a warranty for 20 years from Raven Industries and is attached. It is typically used in Brine Pond, Oilfield Pit liner and other industrial applications. The manufacture specific sheet is attached and the design attached displays the proper installation of the liner.
- 11. The general specification for design and construction are attached in the COPC document.



San Juan Business Unit

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PRODUCED WATER PIT TANK OPEN TOP GRAVITY FLOW TANK INTERNALLY COATED WITH 12-14 MILS AMERON AMERCOAT 385

# DURA-SKRIM®

# J30, J36 & J45

| PROPERTIES                                      | TEST METHOD | J3                       | 0BB   | J3(                      | 68 <b>8</b>              | J45BB                    |                          |  |
|---|-------------|--------------------------|---|--------------------------|--------------------------|--------------------------|--------------------------|--|
|   |             | Min. Roll<br>Averages    | Typical Roll<br>Averages                                      | Min. Roll<br>Averages    | Typical Roll<br>Averages | Min. Roll<br>Averages    | Typical Rol<br>Averages  |  |
| Appearance                                      | MALL STORE  | Black                    | k/Black   | Black                    | /Black                   | Black/Black              |                          |  |
| Thickness                                       | ASTM D 5199 | 27 mil                   | 30 mil  | 32 mil                   | 36 mil                   | 40 mil                   | 45 mil                   |  |
| Weight Lbs Per MSF<br>(oz/yd²)                  | ASTM D 5261 | 126 lbs<br>(18.14)       | 140 lbs<br>(20.16)  |                          |                          | 189 lbs<br>(27.21)       | 210 lbs<br>(30.24)       |  |
| Construction                                    |             | **Extr                   | usion laminated   | with encapsula           | ated tri-direction       | al scrim reinford        | cement                   |  |
| Ply Adhesion                                    | ASTM D 413  | 16 lbs                   | 20 lbs  | 19 lbs                   | 24 lbs                   | 25 lbs                   | 31 lbs                   |  |
| 1* Tensile Strength                             | ASTM D 7003 | 88 lbf MD<br>63 lbf DD   | 110 lbf MD<br>79 lbf DD<br>750 MD<br>750 DD<br>33 MD<br>33 DD | 90 lbf MD<br>70 lbf DD   | 113 lbf MD<br>87 lbf DD  | 110 lbf MD<br>84 lbf DD  | 138 lbf MI<br>105 lbf DD |  |
| 1" Tensile Elongation @<br>Break % (Film Break) | ASTM D 7003 | 550 MD<br>550 DD         |   | 550 MD<br>550 DD         | 750 MD<br>750 DD         | 550 MD<br>550 DD         | 750 MD<br>750 DD         |  |
| 1" Tensile Elongation @<br>Peak % (Scrim Break) | ASTM D 7003 | 20 MD<br>20 DD           |   | 20 MD<br>20 DD           | 30 MD<br>31DD            | 20 MD<br>20 DD           | 36 MD<br>36 DD           |  |
| Tongue Tear Strength                            | ASTM D 5884 | 75 lbf MD<br>75 lbf DD   | 97 lbf MD<br>90 lbf DD  | 75 lbf MD<br>75 lbf DD   | 104 lbf MD<br>92 lbf DD  | 100 lbf MD<br>100 lbf DD | 117 lbf Mi<br>118 lbf Di |  |
| Grab Tensile                                    | ASTM D 7004 | 180 lbf MD<br>180 lbf DD | 218 lbf MD<br>210 lbf DD                                      | 180 lbf MD<br>180 lbf DD | 222 lbf MD<br>223 lbf DD | 220 lbf MD<br>220 lbf DD | 257 lbf MD<br>258 lbf DD |  |
| Trapezoid Tear                                  | ASTM D 4533 | 120 lbf MD<br>120 lbf DD | 146 lbf MD<br>141 lbf DD                                      | 130 lbf MD<br>130 lbf DD | 189 lbf MD<br>172 lbf DD | 160 lbf MD<br>160 lbf DD | 193 lbf MD<br>191 lbf DD |  |
| * Dimensional Stability                         | ASTM D 1204 | <1                       | <0.5  | <1                       | <0.5                     | <1                       | <0.5<br>99 lbf<br>180° F |  |
| Puncture Resistance                             | ASTM D 4833 | 50 lbf                   | 64 lbf  | 65 lbf                   | 83 lbf                   | 80 lbf                   |                          |  |
| Maximum Use Temperature                         |             | 180° F                   | 180° F  | 180° F                   | 180° F                   | 180° F                   |                          |  |
| Minimum Use Temperature                         |             | -70° F                   | -70° F  | -70° F                   | -70° F                   | -70° F                   | -70° F                   |  |

MD = Machine Direction

DD = Diagonal Directions



Note: Minimum Roll Averages are set to take into account product variability in addition to testing variability between laboratories.

\*Dimensional Stability Maximum Value

\*\*DURA-SKRIM J30BB, J36BB & J45BB are a four layer reinforced laminate containing no adhesives. The outer layers consist of a high strength polyethylene film manufactured using virgin grade resins and stabilizers for UV resistance in exposed applications. DURA-SKRIM J30BB, J36BB & J45BB are reinforced with a 1300 denier (minimum) tri-directional scrim reinforcement.

Note: RAVEN INDUSTRIES MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage.



PLANT LOCATION

Sioux Falls, South Dakota

### SALES OFFICE

P.O. Box 5107 Sioux Falls, SD 57117-5107 (605) 335-0174 (605) 331-0333 FAX 800-635-3456

08/06

# RAVEN INDUSTRIES INC. EXPOSED GEOMEMBRANE LIMITED WARRANTY

Raven Industries Inc. warrants Dura-Skrim J30BB, J36BB, and J45BB to be free from manufacturing defects and to be able to withstand normal exposure to sunlight for a period of 20 years from the date of sale for normal use in approved applications in the U.S and Canada, excluding Hawaii. This warranty is effective for products sold and shipped from January 1, 2008 to December 31, 2008. These dates will be updated prior to December 31, 2008.

This Limited Warranty does not include damages or defects in the Raven geomembrane resulting from acts of God, casualty or catastrophe including but not limited to: earthquakes, floods, piercing hail, or tornadoes. The term "normal use" as used herein does not include, among other things improper handling during transportation, unloading, storage or installation, the exposure of Raven geomembranes to harmful chemicals, atypical atmospheric conditions, abuse of Raven geomembranes by machinery, equipment or people; improper site preparation or covering materials, excessive pressures or stresses from any source or improper application or installation. Raven geomembrane material warranty is intended for commercial use only and is not in effect for the consumer as defined in the Magnuson Moss Warranty or any similar federal, state, or local statues. The parties expressly agree that the sale hereunder is for commercial or industrial use only.

Should defects or premature loss of use within the scope of the above Limited Warranty occur, Raven Industries Inc. will, at its option, repair or replace the Raven geomembrane on a pro-rata basis at the then current price in such manner as to charge the Purchaser/User only for that portion of the warranted life which has elapsed since purchase of the material. Raven Industries Inc. will have the right to inspect and determine the cause of any alleged defect in the Raven geomembrane and to take appropriate steps to repair or replace the Raven geomembrane if a defect exists which is covered under this warranty. This Limited Warranty extends only to Raven's geomembrane, and does not extend to the installation service of third parties nor does it extend to materials furnished or installed by others in connection with the intended use of the Raven geomembranes.

Any claim for any alleged breach of this warranty must be made in writing, by certified mail, to the General Manager of Engineered Films Division of Raven Industries Inc. within ten (10) days of becoming aware of the alleged defect. Should the required notice not be given, the defect and all warranties are waived by the Purchaser, and Purchaser shall not have any rights under this warranty. Raven Industries Inc. shall not be obligated to perform repairs or replacements under this warranty unless and until the area to be repaired or replaced is clean, dry, and unencumbered. This includes, but is not limited to, the area made available for repair and/or replacement of Raven geomembrane to be free from all water, dirt, sludge, residuals and liquids of any kind. If after inspection it is determined that there is no claim under this Limited Warranty, Purchaser shall reimburse Raven Industries Inc. for its costs associated with the site inspection.

In the event the exclusive remedy provided herein fails in its essential purpose, and in that event only, the Purchaser shall be entitled to a return of the purchase price for so much of the material as Raven Industries Inc. determines to have violated the warranty provided herein. Raven Industries Inc. shall not be liable for direct, indirect, special, consequential or incidental damages resulting from a breach of this warranty including, but not limited to, damages for loss of production, lost profits, personal injury or property damage. Raven Industries Inc. shall not be obligated to reimburse Purchaser for any repairs, replacement, modifications or alterations made by Purchaser unless Raven Industries Inc. specifically authorized, in writing, said repairs, replacements, modifications or alteration in advance of them having been made. Raven Industry's liability under this warranty shall in no event exceed the replacement cost of the material sold to the Purchaser for the particular installation in which it failed.

Raven Industries Inc. neither assumes nor authorizes any person other than the undersigned of Raven Industries Inc. to assume for it any other or additional liability in connection with the Raven geomembrane made on the basis of the Limited Warranty. The Limited Warranty on the Raven geomembrane herein is given in lieu of all other possible material warranties, either expressed or implied, and by accepting delivery of the material; Purchaser waives all other possible warranties, except those specifically given. This Limited Warranty may only be modified by written document mutually executed by Owner and Raven Industries Inc.

Limited Warranty is extended to the purchaser/owner and is non-transferable and non-assignable; i.e., there are no third-party beneficiaries to this warranty.

Purchaser acknowledges by acceptance that the Limited Warranty given herein is accepted in preference to any and other possible materials warranties.

THIS LIMITED WARRANTY SHALL BE GOVERNED BY SOUTH DAKOTA LAW AND VENUE FOR ALL LEGAL PROCEEDINGS IN CONNECTION WITH THIS LIMITED WARRANTY SHALL BE IN MINNEHAHA COUNTY, SOUTH DAKOTA. RAVEN INDUSTRIES INC. MAKES NO WARRANTY OF ANY KIND OTHER THAN THAT GIVEN ABOVE AND HEREBY DISCLAIMS ALL WARRANTIES, BOTH EXPRESSED OR IMPLIED, OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THIS IS THE ONLY WARRANTY THAT APPLIES TO THE MATERIALS REFERRED TO HEREIN AND RAVEN INDUSTRIES INC. DISCLAIMS ANY LIABILITY FOR ANY WARRANTIES GIVEN BY ANY OTHER PERSON OR ENTITY, EITHER WRITTEN OR ORAL.

RAVEN INDUSTRIES' WARRANTY BECOMES AN OBLIGATION OF RAVEN INDUSTRIES INC. TO PERFORM UNDER THE WARRANTY ONLY UPON RECEIPT OF FINAL PAYMENT AND EXECUTION BY A DULY AUTHORIZED OFFICER OF RAVEN INDUSTRIES INC.

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

In accordance with Rule 19.15.17 the following information describes the operation and maintenance of Below Grade Tank (BGT) on ConocoPhillips Company (COPC) locations. This is COPC's standard procedure for all BGT. A separate plan will be submitted for any BGT which does not conform to this plan.

#### General Plan:

- COPC will operate 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 environment. COPC will accomplish this by performing an inspection on a monthly basis, installing cathodic protection, and automatic overflow shutoff devices as seen on the design plan.
- 2. COPC will not discharge into or store any hazardous waste in the BGT.
- 3. COPC shall operate and install the below-grade tank to prevent the collection of surface water run-on. COPC has built in shut off devices that do not allow a below-grade tank to overflow. COPC constructs berms and corrugated retaining walls at least 6" above ground to keep from surface water run-on entering the below grade tank as shown on the design plan.
- 4. As per 19.17.15.12 Subsection D, Paragraph 3, COPC will inspect the below-grade tank at least monthly reviewing several items which 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. In addition, COPC's multi-skilled operators (MSOs) are required to visit each well location once per week. If detected on either inspection, COPC shall remove any visible or measurable layer of oil from the fluid surface of a below-grade tank in an effort to prevent significant accumulation of oil overtime. The written record of the monthly inspections will include the items listed above and will be maintained for five years.
- 5. COPC shall require and maintain a 10" adequate freeboard to prevent overtopping of the below-grade tank.
- 6. If the below grade tank develops a leak, or if any penetration of the pit liner or below grade tank, occurs below the liquid's surface, then COPC shall remove all liquid above the damage or leak line within 48 hours. COPC shall notify the appropriate district office. COPC shall repair or replace the pit liner or below grade tank, within 48 hours of discovery. If the below grade tank or pit liner does not demonstrate integrity, COPC shall promptly remove and install a below grade tank or pit liner that complies with Subsection I of 19.15.17.11 NMAC. COPC shall notify the appropriate district office of a discovery of leaks less than 25 barrels as required pursuant to Subsection B of 19.15.3.116 NMAC shall be reported within twenty-four (24) hours of discovery of leaks greater than 25 barrels. In addition, immediate verbal notification pursuant to Subsection B, Paragraph (1), and Subparagraph (d) of 19.15.3.116 NMAC shall be reported to the division's Environmental Bureau Chief.

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

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure requirements of Below Grade Tanks (BGTs) on ConocoPhillips Company locations hereinafter known as COPC locations. This is COPC's standard procedure for all BGTs. A separate plan will be submitted for any BGT which does not conform to this plan.

#### General Requirements:

- COPC shall close a below-grade tank within the time periods provided in Subsection A 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) permitted below-grade tanks within 60 days of cessation of the below-grade tank's operation., or c) an earlier date that the division requires because of imminent danger to fresh water, public health or the environment. For any closure, COPC will file the C144 Closure Report as required.
- 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) 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.
- 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. Documentation of how the below-grade tank was disposed of or recycled will be provided in the closure report.
- 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.
- 5. COPC shall 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 analyze for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method that the division approves, does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. COPC shall notify the division of its results on form C-141.

- 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.
- 7. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E 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.
- 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
  - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.
- The surface owner shall be notified of COPC's closing of the below-grade tank prior to closure as per the approved closure plan via certified mail, return receipt requested.
- 10. 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.
- 11. COPC shall seed the disturbed areas the first growing season after the operator closes the pit. 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 jurisdicted lands and division-approved seed mixtures (administratively approved if required) will be utilized on all State or private lands. Vegetative cover will equal 70% of the native perennial vegetative cover (unimpacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. 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.
- 12. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.
- 13. 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 belowgrade tank. Closure report will be filed on C-144 and incorporate the following:
  - Soil Backfilling and Cover Installation
  - Re-vegetation application rates and seeding techniques
  - Photo documentation of the site reclamation
  - Confirmation Sampling Results
  - Proof of closure notice

# OCD Aztec District III Conoco Phillips/Burlington Checklist Below Grade Tank Registration

# 19,15.17.9 Permit application

Signed C-144 (Page 5 of C-144)

Site Specific Hydrogeology

# 19.15.17.10 Siting requirements

New Mexico Office of State Engineer attachment

USGS TOPO map

Aerial Map

Mines, Mills and Quarries Web Map

FIRM map (flood insurance rate map from Federal Emergency Management Agency)

# 19.15.17.11 Design Plan Contents

Below Grade Tank Design and Construction Plan.

# 19.15.17.12 Operating and Maintenance Plan

Below Grade Tank Operating and Maintenance Plan

# 19.15.17.13 Closure Plan

Below Grade Tank Closure Plan

**Requirements:** 

Registration Date: 3/25/2016