

3R - 097

P&A REPORT

07 / 16 / 2013



**CONESTOGA-ROVERS
& ASSOCIATES**

6121 Indian School Road, NE Suite 200
Albuquerque, NM, USA 87110
Telephone: (505) 884-0672 Fax: (505) 884-4932
<http://www.craworld.com>

July 16, 2013

Reference No. 074940

Mr. Glenn von Gonten
New Mexico Oil Conservation Division
1220 South Saint Francis Dr.
Santa Fe, NM 87505

Re: ConocoPhillips Company Shepherd and Kelsey No. 1 Site Monitoring Well Plugging
and Abandonment Notification
API No. 30-045-07802
NMOCD No. 3R-097
CRA Project No. 074940

Dear Mr. von Gonten:

This letter discusses monitor well plugging and abandonment activities conducted by Conestoga-Rovers & Associates (CRA) at the ConocoPhillips Shepherd and Kelsey No. 1 (Site) located in Section 29, Township 29N, Range 11W, of San Juan County, NM. A Site Location Map and a Site Layout Map have been included as **Figures 1** and **2**, respectively. This work was completed on May 22, 2013 after receiving approval from the New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division (NMOCD) in a letter dated November 9, 2012 granting remediation site closure, and a letter from the New Mexico Office of the State Engineer (NMOSE) dated May 13, 2013 granting approval for the abandonment of monitor wells with Specific Plugging Conditions. Copies of these letters are included as **Appendix A** and **Appendix B**, respectively.

On May 22, 2013, Monitor Wells DG-1, SB-12, MW-1 (MW-NW), MW-NE, and DG-MW were plugged and abandoned by National Exploration, Wells, and Pumps (National EWP) of Peralta, New Mexico. Monitor Wells UG-1 and UG-2 could not be located and have likely been destroyed due to agricultural land use. The casing of each located monitor well was pulled. Grout, consisting of Type I/II Portland cement, was then pumped from the bottom of the borehole to approximately six inches below ground surface through a 1-inch tremie pipe. One Monitor Well, SB-12 was overdrilled to five feet below ground surface in order to pull the casing. The entire borehole and open well annulus for SB-12 was plugged with Type I/II Portland cement. No surface completions were present for any of the monitor wells. A concrete



**CONESTOGA-ROVERS
& ASSOCIATES**

6121 Indian School Road, NE Suite 200
Albuquerque, NM, USA 87110
Telephone: (505) 884-0672 Fax: (505) 884-4932
<http://www.craworld.com>

plug was placed over top of each grouted borehole and native soil was used to return the surface to grade completing the plugging and abandonment of the monitor wells.

Specifications for all wells including well identification number, casing diameter, total depth, depth to groundwater, location (latitude/longitude), and surface completion type were field checked during plugging and abandonment activities. The theoretical and actual grout volumes used in each monitor well were calculated and recorded. This information is included in **Table 1. Well Plugging Records** were submitted to the NMOSE by National EWP on June 3, 2013, and received on June 4, 2013. Well Plugging Records are included as **Appendix C**.

Please contact Kelly Blanchard at 505.884.0672 or keblanchard@craworld.com if you have any questions or require additional information.

Yours Truly,

CONESTOGA-ROVERS & ASSOCIATES

Kelly E. Blanchard
Project Manager

KB/cm/1
Encl.

cc: Terry Lauck, ConocoPhillips Company (electronic only)

FIGURES

SITE LOCATION MAP AND SITE LAYOUT MAP

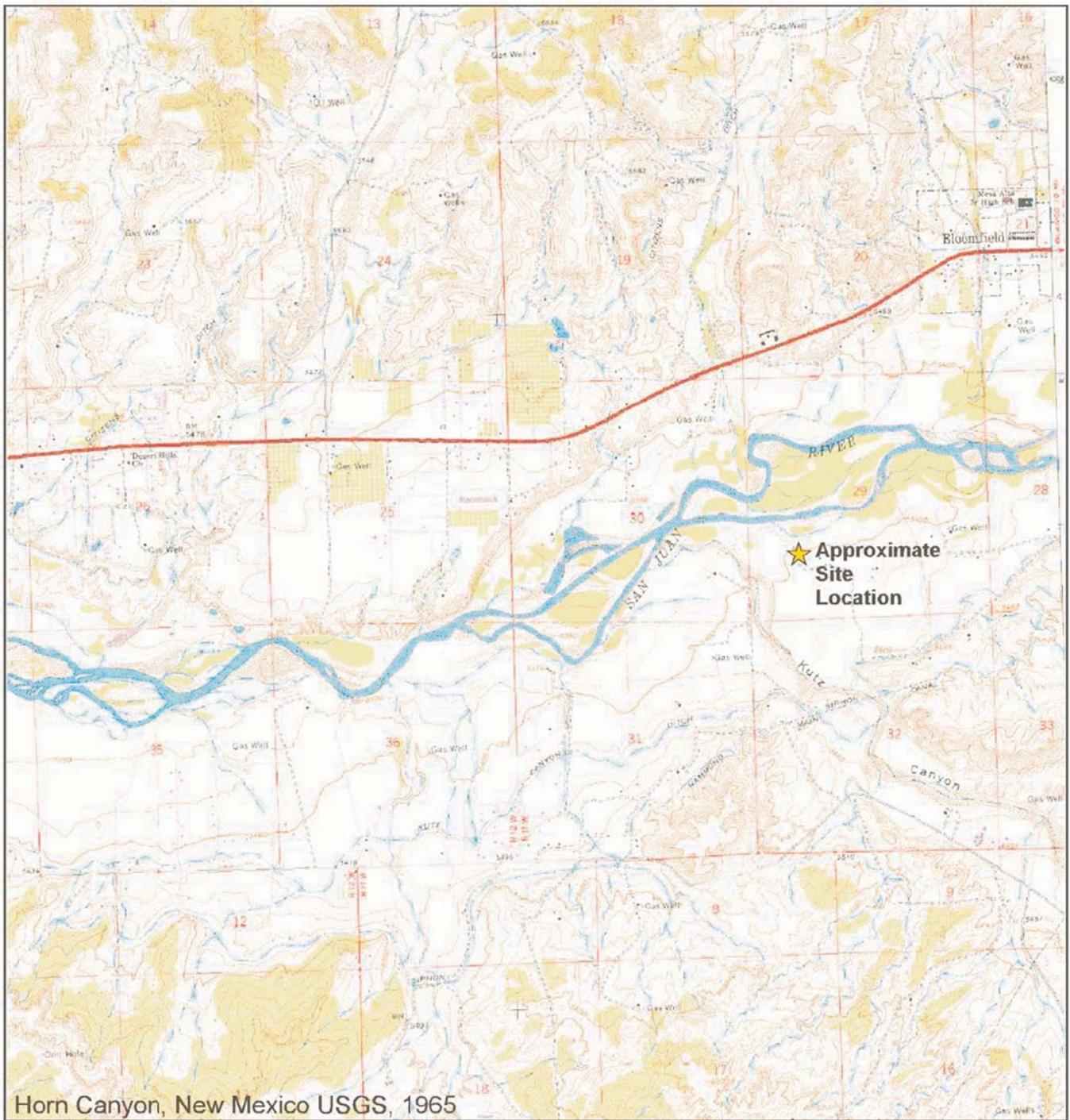
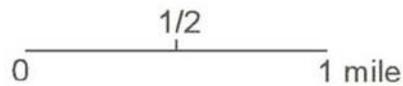


FIGURE 1.
SITE LOCATION MAP
CONOCOPHILLIPS
SHEPHERD & KELSEY #1
Bloomfield, New Mexico



★ = Approximate Site Location



CONESTOGA-ROVERS
& ASSOCIATES

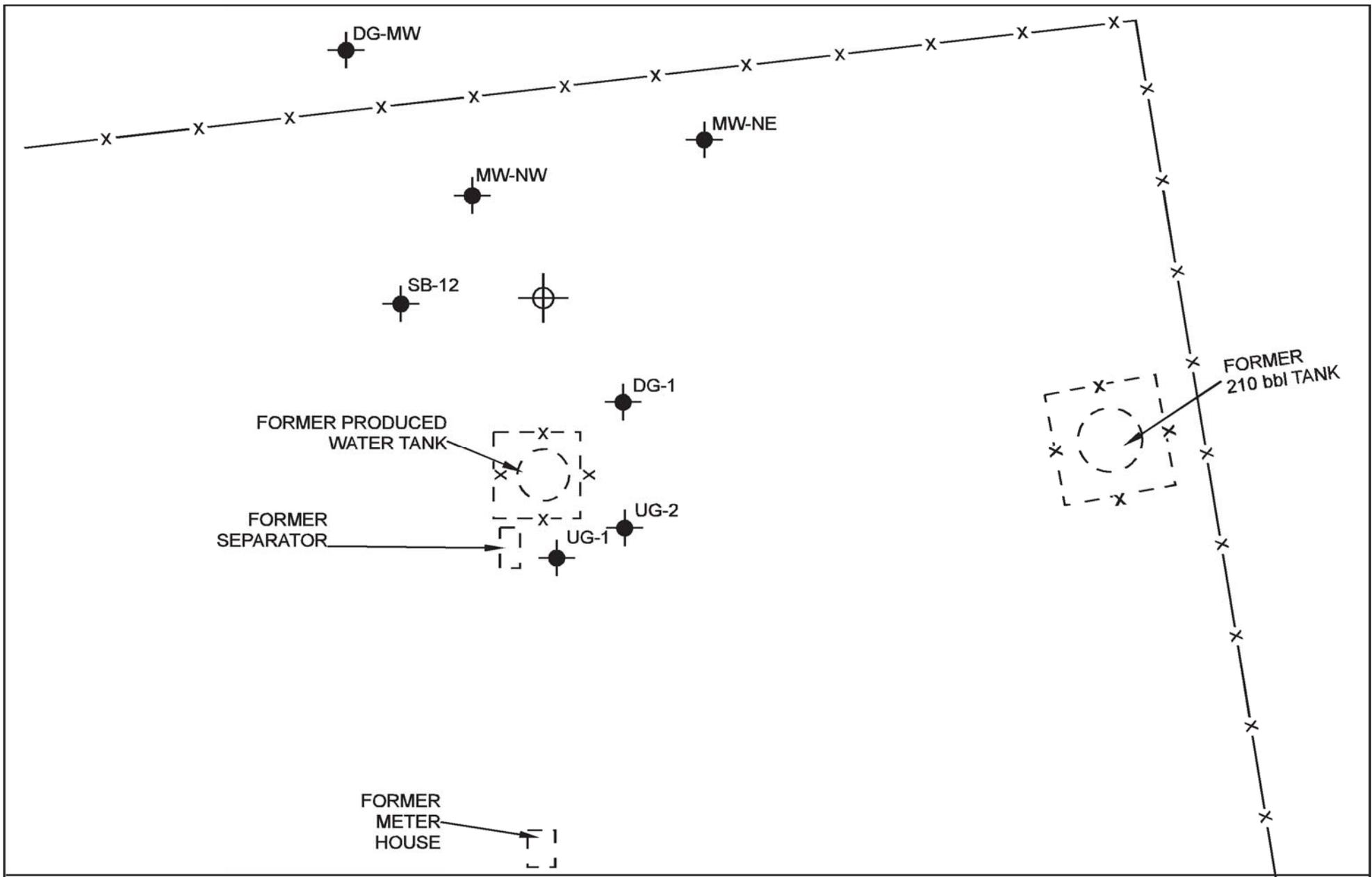


FIGURE 2:
 SITE LAYOUT MAP
 CONOCOPHILLIPS
 SHEPHERD AND KELSEY #1

- LEGEND**
- ⊕ SHEPHERD KELSEY #1 WELLHEAD (plugged and abandoned 22007)
 - ◆ MONITORING WELL



TABLE
WELL SPECIFICATIONS

Well Specifications for Plugging Plan of Operations
 ConocoPhillips Company Shepherd and Kelsey Number 1
 San Juan County, New Mexico

Well #	Well Type	Casing Diameter (in)	Total Depth (feet bgs)	Groundwater level (feet bgs)	Theoretical grout volume (gallons)	Actual grout volume (gallons)	Approx. Latitude (N)	Approx. Longitude (W)	Surface Completion Type	Screened Interval feet (bgs)	NMOSE Permit
MW-1 (MW-NW)	MW	2	11.5	5.63	1.76	4	36.694081	-108.020914	temporary flush mount	unknown	Not Permitted
DG-MW	MW	2	11.1	6.27	1.81	4	36.963935	-108.021000	temporary flush mount	unknown	Not Permitted
SB-12	MW	2	10.0	5.63	13.87	20	36.693733	-108.020946	temporary flush mount	unknown	Not Permitted
DG-1	MW	2	12.0	*	1.96	5	36.69356	-108.020398	temporary flush mount	unknown	Not Permitted
MW-NE	MW	2	11.5	5.49	1.76	3	36.694101	-108.020725	temporary flush mount	unknown	Not Permitted

All wells are non-artesian and breach only one aquifer

MW = Groundwater Monitoring Well

bgs = below ground surface

TD = Total Depth

* = Well filled with soil/debris due to damage

APPENDIX A

NOVEMBER 9, 2012 NMOCD FORMAL REQUEST FOR SITE CLOSURE AND NO FURTHER
ACTION STATUS LETTER

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John Bemis
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division



NOVEMBER 9, 2012

Mr. Terry Lauck
Site Manager
ConocoPhillips Company
Risk Management & Remediation
420 South Keeler Avenue
Bartlesville, OK 74004

Re: Site Closure Request of July 22, 2010 for Federal No. 15 (3R-087)
Site Closure Request of July 22, 2010 for Shepherd & Kelsey No. 1 (3R-097)
Site Closure Request of March 22, 2012 for Shepherd & Kelsey No. 1E (3R-098)

Dear Mr. Lauck:

After meeting with you on November 6, 2012, and after conducting a file review, the Oil Conservation Division (OCD) has determined that ConocoPhillips has completed corrective action for releases as required by 19.15.29.11 NMAC at the three remediation sites listed below.

3R-087	ConocoPhillips Federal No. 15
3R-097	ConocoPhillips Shepherd & Kelsey No. 1
3R-098	ConocoPhillips Shepherd & Kelsey No. 1E

OCD has closed these three cases in its database. ConocoPhillips may plug and abandon all monitor wells and remove all remediation equipment. Please include a copy of this closure approval letter when you submit your Annual Ground Water Monitoring Report.

If you have any questions, please contact Jim Griswold at 505-476-3465. Thank you for your cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read "Glenn von Gonten". The signature is fluid and cursive, with a long horizontal stroke at the end.

Glenn von Gonten
Senior Hydrologist

GvG/gvg

APPENDIX B

MAY 13, 2013 NMOSE APPROVAL FOR ABANDONMENT OF MONITOR WELLS WITH
SPECIFIC PLUGGING CONDITIONS



STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
AZTEC

Scott A. Verhines, P.E.
State Engineer

100 Gossett Drive, Suite A
Aztec, New Mexico 87410

May 13, 2013

Conestoga-Rovers & Associates
ATTN: Mrs. Kelly Blanchard
6121 Indian School Road NE, Suite 200
Albuquerque, NM 87110

RE: Well Plugging Plan of Operations for ConocoPhillips Shepherd and Kelsey #1; near
Bloomfield, New Mexico

Dear Mrs. Blanchard:

After reviewing the Well Plugging Plan of Operations submitted to obtain OSE approval for the abandonment of five monitoring wells located at the referenced facility, which was received on May 13, 2013, the OSE is returning a favorable approval with Specific Plugging Conditions (attached). Please pay special attention to Specific Plugging Condition number 3, which requires the hydration of the proposed bentonite additive, with the correct amount of water, before mixing into the cement slurry.

Please submit a completed Well Plugging Report, along with a copy of the approved plugging conditions, describing the actual abandonment process and itemized materials used to the address referenced in the attached approval conditions within 20 days after completion of well plugging.

Should you have any further questions or concerns regarding this correspondence, feel free to contact me at 505-334-4571.

Sincerely,

Blaine A. Watson, P.G.
District V Manager

Enclosures

cc: Aztec Reading (cover only)
Aztec Well Plugging Records
WATERS



DISTRICT 5
 Scott A. Verhines, P.E.
NEW MEXICO STATE ENGINEER

Kelly Blanchard of Conestoga-Rovers & Associates (as consultant for ConocoPhillips Company) has identified 5 monitoring wells (no OSE File numbers), as tabulated below, to be plugged in accordance with NMOCD requirements for a discontinued monitoring well network. National Exploration Wells and Pumps (formerly WDC) will perform the plugging under well driller license #WD-1210. Most of the wells are believed to have semi-typical monitoring well construction, including a bentonite annular seal above the sand pack, with a cement/bentonite grout to ground surface. Depth to water is estimated to be approximately 4 to 7 feet below land surface.

Location: ConocoPhillips Shepherd and Kelsey #1 well site, southwest of Bloomfield, (San Juan County), New Mexico.

Approximate well coordinates: See tabulated data below.

<u>Well Name</u>	<u>Inside Diameter (inches)</u>	<u>Depth to Water (feet)</u>	<u>Total Depth (feet)</u>	<u>Latitude North</u>	<u>Longitude East</u>
MW-1	2	6.34	11	36.694081	108.020914
DG-MW	2	Unknown	7.5	36.963935	108.021000
SB-12	2	5.68	11.5	36.693733	108.020946
UG-2	2	4.3	10	36.693560	108.020398
MW-NE	2	Unknown	7.5	36.694101	108.020725

NMOCD project manager: Jim Griswold/Glenn VonGonten 505-479-3465, NMOCD approval letter dated 11/9/12 was attached.

Specific Plugging Conditions of Approval for five monitoring wells, ConocoPhillips Shepherd and Kelsey #1 well site (rural Bloomfield), San Juan County, NM

1. Water well drilling and other well drilling activities, including well plugging, are regulated under 19.27.4 NMAC, which requires any person engaged in the business of well drilling within New Mexico to obtain a Well Driller License issued by the New Mexico Office of the State Engineer (NMOSE). Therefore, the firm of a New Mexico licensed Well Driller shall perform the well plugging.
2. Theoretical volume of sealant required for abandonment of 2-inch diameter casings is approximately 0.16 gallons per foot. The plugging plan of operations listed approximately 47.5 feet for the total footage in five 2-inch diameter wells. For a total depth of 47.5 feet in 2-inch wells, the required plugging volume should not be less than 7.75 gallons. Total minimum volume of sealant required shall be calculated upon sounding the actual pluggable depth of the wells and multiplying by the correct volume factor for the casing diameter.
3. The Well Plugging Plan of Operations submitted requests the use of Portland Type I/II cement with a 3-5% bentonite additive. Portland cement has a fundamental water demand of 5.2 gallons water per 94-lb. sack of cement, and this plan (as submitted) proposed 6.0 gallons of water per 94-lb. sack of

cement. Use of mix water increment in excess of the fundamental water demand results in a thinned mix of cement prone to shrinkage that may disrupt effective sealing and hydraulic separation. AWWA Well Standards do allow the use of a maximum of 6.0 gallons water per 94-lb. sack of cement if necessary for pumpability of neat cement grout. This volume excludes the additional water needed to separately hydrate the bentonite additive, as discussed below.

Pure bentonite powder (“90 barrel yield”) is allowed as a cement additive under NMOSE / AWWA guidelines, and neither granular bentonite nor extended-yield bentonite shall be mixed with cement for the purpose of this plugging. When supplementing a cement slurry with bentonite powder as requested, water demand for the mix increases at a rate of approximately 0.65 gallons of water for each 1% increment of bentonite by dry weight cement (above a water demand of not to exceed 6.0 gallons water per 94-lb. sack of cement). Therefore, a 3% bentonite/cement mix may contain up to 7.95 gallons of water (total) per 94-lb. sack of cement. This mixture would consist of 1.95 gallons of water used to make the bentonite slurry and 6.0 gallons of water for mixing one 94-lb. sack of cement. If a 5% bentonite additive rate is used, the volume of water for the bentonite slurry would be 3.25 gallons.

The bentonite must be hydrated separately with its required increment of water before being mixed into the wet cement. If water is otherwise added to the combination of dry ingredients or the dry bentonite is blended into wet cement, the alkalinity of the cement will restrict the yield of the bentonite powder, resulting in excess free water in the slurry and excessive cement shrinkage upon curing.

4. Placement of the sealant within the wells shall be by pumping through a tremie pipe extended to near well bottom, and kept below top of the slurry column as the well is plugged from bottom-upwards in a manner that displaces the standing water column.
5. Prior to, or upon completion of plugging, the well casing may be cut-off below grade as necessary to allow approved construction onsite, provided a minimum 6-inch thickness of reinforced abandonment grout or concrete completely covers the top of the cut-off casing. More stringent local building codes may apply.
6. Should the NMOCD, or another regulatory agency sharing jurisdiction of the project authorize, or by regulation require a more stringent well plugging procedure than herein acknowledged, the more-stringent procedure should be followed. This, in part, includes provisions regarding pre-authorization to proceed, contaminant remediation, inspection, pulling/perforating of casing, or prohibition of free discharge of any fluid from the borehole during or related to the plugging process.
7. NMOSE witnessing of the plugging will not be required, but shall be facilitated if a NMOSE observer is onsite. NMOSE witnessing may be requested during normal work hours by calling the District 5 NMOSE Office at 505-334-4571, at least 48-hours in advance. NMOSE inspection will occur dependent on personnel availability.
8. Well Plugging Record(s) (available at: <http://www.ose.state.nm.us/PDF/WellDrillers/WD-11.pdf>) itemizing the actual abandonment process and materials used shall be filed with the State Engineer (NMOSE, P.O. Box 25102 - 407 Galisteo Street - Room 102, Santa Fe, NM 87504-5102), within 20 days after completion of well plugging. Please attach one copy of these plugging conditions.

The NMOSE Well Plugging Plan of Operations notices dated May 9, 2013, with any OSE annotations, are hereby approved with the aforesaid conditions applied, when signed by an authorized designee of the State Engineer:



 Blaine Watson, NMOSE District 5, Water Rights Division

Date: May 13, 2013



**CONESTOGA-ROVERS
& ASSOCIATES**

Albuquerque, NM, USA 87110
Telephone: (505) 884-0672 Fax: (505) 884-4932
<http://www.craworld.com>

May 9, 2013

Reference No. 074940

Mr. Blaine Watson
New Mexico Office of the State Engineer
100 Gossett Dr.
Suite A
Aztec, NM 87410

Dear Mr. Watson:

Re: ConocoPhillips Shepherd and Kelsey No. 1 Well Plugging Plan of Operations

Conestoga-Rovers and Associates, on behalf of ConocoPhillips Company Risk Management and Remediation, herein submits one copy of the above-referenced document, for Monitor Wells located at the Shepherd and Kelsey No. 1 Natural Gas Production Wellsite in San Juan County, New Mexico. Work is scheduled May 21, 2013 pending your approval of the attached Well Plugging Plan of Operations Forms.

If you have any questions or require additional information, please contact me at (505) 884-0672 or keblanchard@craworld.com.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Kelly E. Blanchard
Project Manager

KB/cjg/01

Encl.

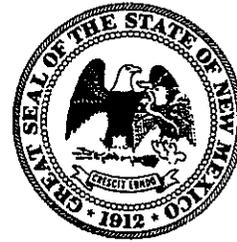
cc: Terry Lauck, ConocoPhillips (electronic only)

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
2013 MAY 13 AM 10:15

Equal
Employment Opportunity
Employer



WELL PLUGGING PLAN OF OPERATIONS



STATE ENGINEER OFFICE
ALBUQUERQUE, NEW MEXICO
2013 MAY 13 AM 10:16

NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging.

I. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP:

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: See Attached Table

Name of well owner: ConocoPhillips Risk Management and Remediation

Mailing address: 1380G Plaza Office Bldg, 315 Johnstone AVE

City: Bartlesville State: Oklahoma Zip code: 74004

Phone number: (918) 661-0935 E-mail: terry.s.lauck@conocophillips.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: National Exploration Wells and Pumps

New Mexico Well Driller License No.: WD1210 Expiration Date: 10/31/2013

IV. WELL INFORMATION:

Note: A copy of the existing Well Record for the well to be plugged should be attached to this plan.

- 1) GPS Well Location: Latitude: See Attached Table deg, _____ min, _____ sec
Longitude: _____ deg, _____ min, _____ sec, NAD 83
- 2) Reason(s) for plugging well: Request from New Mexico Oil Conservation Division to plug and abandon all site wells at the Shepherd and Kelsey No. 1 site. See attached letter.
- 3) Was well used for any type of monitoring program? Yes If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.
- 4) Does the well tap brackish, saline, or otherwise poor quality water? No If yes, provide additional detail, including analytical results and/or laboratory report(s): _____
- 5) Static water level: See Attached Table feet below land surface / feet above land surface (circle one)
- 6) Depth of the well: See Attached Table feet

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO

2013 MAY 13 AM 10:15

7) Grout additives requested, and percent by dry weight relative to cement: 3 to 5 percent bentonite pre hydrated with 0.65 gallons of water per 1% of bentonite powder used.

8) Additional notes and calculations: Work scheduled to begin May 21, 2013

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

Work set to begin May 21, 2013.

VIII. SIGNATURE:

I, Bryan Nydoske (National EWP), say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

[Signature]
Signature of Applicant

5/9/13
Date

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

- Approved subject to the attached conditions.
- Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 13th day of May, 2013

Scott A. Verhines, State Engineer

By: Blaine Watson

2013 MAY 13 AM 10:16

- 7) Inside diameter of innermost casing: See Attached Table inches.
- 8) Casing material: PVC
- 9) The well was constructed with:
 an open-hole production interval, state the open interval:
 a well screen or perforated pipe, state the screened interval(s): See Attached Table
- 10) What annular interval surrounding the artesian casing of this well is cement-grouted? N/A
- 11) Was the well built with surface casing? No If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? NA If yes, please describe: See Attached Table
- 12) Has all pumping equipment and associated piping been removed from the well? NA If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING:

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal.

- 1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well: Tremie pipe will be used to grout wells from the bottom to top of casing.
- 2) Will well head be cut-off below land surface after plugging? Yes

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant

- 1) For plugging intervals that employ cement grout, complete and attach Table A.
- 2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.
- 3) Theoretical volume of grout required to plug the well to land surface: See Attached Table
- 4) Type of Cement proposed: Type I/II Portland
- 5) Proposed cement grout mix: 6.0 gallons of water per 94 pound sack of Portland cement.
- 6) Will the grout be: batch-mixed and delivered to the site
 mixed on site

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)			See Attached Table
Bottom of proposed interval of grout placement (ft bgl)			See Attached Table
Theoretical volume of grout required per interval (gallons)			See Attached Table
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement			6.0 gallons
Mixed on-site or batch-mixed and delivered?			On-Site
Grout additive 1 requested			bentonite powder
Additive 1 percent by dry weight relative to cement			3 to 5 % - to be pre-hydrated with 0.65 gallons of water per 1%
Grout additive 2 requested			
Additive 2 percent by dry weight relative to cement			

STATE ENGINEER OFFICE
 AZTEC, NEW MEXICO
 2013 MAR 13 AM 10:16

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)			
Bottom of proposed sealant of grout placement (ft bgl)			
Theoretical volume of sealant required per interval (gallons)			
Proposed abandonment sealant (manufacturer and trade name)			

STATE ENGINEER OFFICE
 AZTEC, NEW MEXICO
 2013 MAY 13 AM 10:16

Well Specifications for Plugging Plan of Operations
 ConocoPhillips Company Shepherd and Kelsey Number 1
 San Juan County, New Mexico

Well #	Well Type	Casing Diameter (In)	Approximate Total Depth (feet bgs)	Approx. Groundwater level (feet bgs)	Approx. volume (gallons)	Approx. Latitude (N)	Approx. Longitude (W)	Surface Completion Type	Screened Interval feet (bgs)	NMOSE Permit
MW-1	MW	2	11	8.34	1.78	38.894081	-108.020914	temporary flush mount	unknown	Not Permitted
DG-MW	MW	2	7.5	unknown	1.20	38.893935	-108.021000	temporary flush mount	unknown	Not Permitted
SB-12	MW	2	11.5	5.68	1.84	38.893733	-108.020948	temporary flush mount	unknown	Not Permitted
UG-2	MW	2	10	4.3	1.60	38.89356	-108.020398	temporary flush mount	unknown	Not Permitted
MW-NE	MW	2	7.5	unknown	1.20	38.894101	-108.020725	temporary flush mount	unknown	Not Permitted

All wells are non-artesian and breach only one aquifer

MW = Groundwater Monitoring Well

bgs = below ground surface

TD = Total Depth

Unknown = Well located during previous field activities but filled with soil/debris due to damage

STATE ENGINEER OFFICE
 AZTEC, NEW MEXICO
 2013 MAY 13 AM 10:16

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John Bemis
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division



NOVEMBER 9, 2012

Mr. Terry Lauck
Site Manager
ConocoPhillips Company
Risk Management & Remediation
420 South Keeler Avenue
Bartlesville, OK 74004

**Re: Site Closure Request of July 22, 2010 for Federal No. 15 (3R-087)
Site Closure Request of July 22, 2010 for Shepherd & Kelsey No. 1 (3R-097)
Site Closure Request of March 22, 2012 for Shepherd & Kelsey No. 1E (3R-098)**

Dear Mr. Lauck:

After meeting with you on November 6, 2012, and after conducting a file review, the Oil Conservation Division (OCD) has determined that ConocoPhillips has completed corrective action for releases as required by 19.15.29.11 NMAC at the three remediation sites listed below.

3R-087	ConocoPhillips Federal No. 15
3R-097	ConocoPhillips Shepherd & Kelsey No. 1
3R-098	ConocoPhillips Shepherd & Kelsey No. 1E

OCD has closed these three cases in its database. ConocoPhillips may plug and abandon all monitor wells and remove all remediation equipment. Please include a copy of this closure approval letter when you submit your Annual Ground Water Monitoring Report.

If you have any questions, please contact Jim Griswold at 505-476-3465. Thank you for your cooperation.

Sincerely,

A handwritten signature in black ink that reads "Glenn von Gonten".

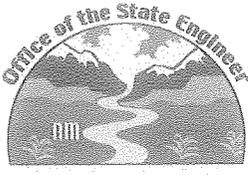
Glenn von Gonten
Senior Hydrologist

GvG/gvg

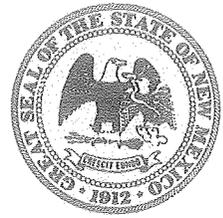
2013 MAY 13 PM 3:51
STATE ENGINEER OFFICE
AZTEC, NEW MEXICO

APPENDIX C

MONITOR WELL PLUGGING RECORDS



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: _____ Well Not Permitted, Site Shepard and Kelsey No MW-NE _____

Well owner: Conoco Phillips Phone No.: 918-553-0889

Mailing address: 1380 G Plaza Office Building, 315 Johnson Ave.

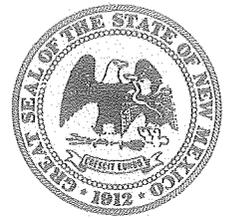
City: Bartlesville State: OK Zip code: 74004

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: National Exploration Wells and Pumps
- 2) New Mexico Well Driller License No.: WD1210 Expiration Date: 10-31-13
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Christopher Thornburg
- 4) Date well plugging began: 5-22-13 Date well plugging concluded: 5-22-13
- 5) GPS Well Location: Latitude: 36.694101 deg, _____ min, _____ sec
Longitude: -108.020725 deg, _____ min, _____ sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 11.5 ft below ground level (bgl),
by the following manner: Removed all well materials prior to abandonment
- 7) Static water level measured at initiation of plugging: 5.49 ft bgl (Casing full of soil to 4' BGS)
- 8) Date well plugging plan of operations was approved by the State Engineer: 5-13-13
- 9) Were all plugging activities consistent with an approved plugging plan? Yes _____ If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: Well Not Permitted, Site Shepard and Kelsey No MW-1

Well owner: Conoco Phillips Phone No.: 918-553-0889

Mailing address: 1380 G Plaza Office Building, 315 Johnson Ave.

City: Bartlesville State: OK Zip code: 74004

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: National Exploration Wells and Pumps
- 2) New Mexico Well Driller License No.: WD1210 Expiration Date: 10-31-13
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Christopher Thornburg
- 4) Date well plugging began: 5-22-13 Date well plugging concluded: 5-22-13
- 5) GPS Well Location: Latitude: 36.694081 deg, min, sec
Longitude: -108.020914 deg, min, sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 11.5 ft below ground level (bgl),
by the following manner: Removed all well materials prior to abandonment
- 7) Static water level measured at initiation of plugging: 5.63 ft bgl (Casing full of soil to 4' BGS)
- 8) Date well plugging plan of operations was approved by the State Engineer: 5-13-13
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

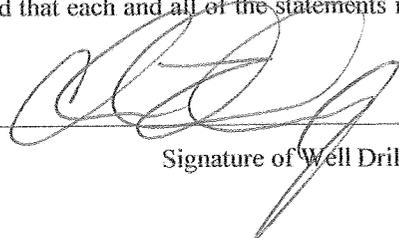
For each interval plugged, describe within the following columns:

<u>Depth</u> (ft bgl)	<u>Plugging Material Used</u> (include any additives used)	<u>Volume of Material Placed</u> (gallons)	<u>Theoretical Volume of Borehole/ Casing</u> (gallons)	<u>Placement Method</u> (tremie pipe, other)	<u>Comments</u> ("casing perforated first", "open annular space also plugged", etc.)
	Portland Type I/II Cement No Bentonite	4 Gallons	1.76	Tremie Pipe and Pump	Well Casing Confirmed as 2" Dia. All well materials removed from borehole prior to plugging.

MULTIPLY	BY	AND OBTAIN
cubic feet x	7.4805	= gallons
cubic yards x	201.97	= gallons

III. SIGNATURE:

I, Christopher Thornburg, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.


Signature of Well Driller

5-23-13
Date



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: _____ Well Not Permitted, Site Shepard and Kelsey No DG-1 _____

Well owner: Conoco Phillips Phone No.: 918-553-0889

Mailing address: 1380 G Plaza Office Building, 315 Johnson Ave.

City: Bartlesville State: OK Zip code: 74004

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: National Exploration Wells and Pumps
- 2) New Mexico Well Driller License No.: WD1210 Expiration Date: 10-31-13
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Christopher Thornburg
- 4) Date well plugging began: 5-22-13 Date well plugging concluded: 5-22-13
- 5) GPS Well Location: Latitude: 36.69356 deg, _____ min, _____ sec
Longitude: -108.020398 deg, _____ min, _____ sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 12 ft below ground level (bgl),
by the following manner: Removed all well materials prior to abandonment
- 7) Static water level measured at initiation of plugging: N/A ft bgl (Casing full of soil to 4' BGS)
- 8) Date well plugging plan of operations was approved by the State Engineer: 5-13-13
- 9) Were all plugging activities consistent with an approved plugging plan? Yes _____ If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

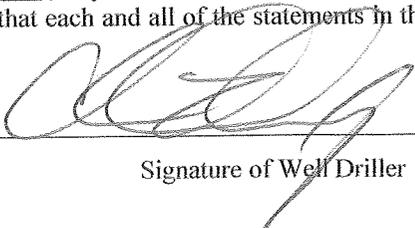
For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments (“casing perforated first”, “open annular space also plugged”, etc.)
	Portland Type I/II Cement No Bentonite	5 Gallons	1.958	Tremie Pipe and Pump	Well Casing Confirmed as 2” Dia. All well materials removed from borehole prior to plugging.

MULTIPLY	BY	AND OBTAIN
cubic feet x	7.4805	= gallons
cubic yards x	201.97	= gallons

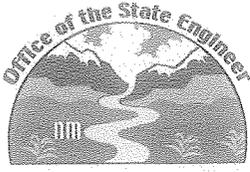
III. SIGNATURE:

I, Christopher Thornburg, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

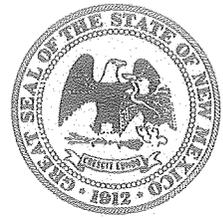


 Signature of Well Driller

 5-23-13
 Date



PLUGGING RECORD



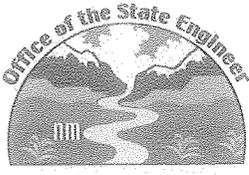
NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

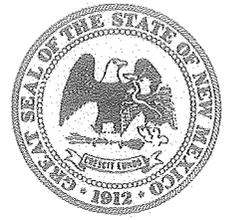
State Engineer Well Number: _____ Well Not Permitted, Site Shepard and Kelsey No1 DG-MW _____
 Well owner: Conoco Phillips Phone No.: 918-553-0889
 Mailing address: 1380 G Plaza Office Building, 315 Johnson Ave.
 City: Bartlesville State: OK Zip code: 74004

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: National Exploration Wells and Pumps
- 2) New Mexico Well Driller License No.: WD1210 Expiration Date: 10-31-13
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Christopher Thornburg
- 4) Date well plugging began: 5-22-13 Date well plugging concluded: 5-22-13
- 5) GPS Well Location: Latitude: 36.963935 deg, _____ min, _____ sec
 Longitude: -108.021000 deg, _____ min, _____ sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 11.1 ft below ground level (bgl),
 by the following manner: Ground water level meter
- 7) Static water level measured at initiation of plugging: 6.27 ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 5-13-13
- 9) Were all plugging activities consistent with an approved plugging plan? Yes _____ If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: Well Not Permitted, Site Shepard and Kelsey No SB-12

Well owner: Conoco Phillips Phone No.: 918-553-0889

Mailing address: 1380 G Plaza Office Building, 315 Johnson Ave.

City: Bartlesville State: OK Zip code: 74004

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: National Exploration Wells and Pumps
- 2) New Mexico Well Driller License No.: WD1210 Expiration Date: 10-31-13
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Christopher Thornburg
- 4) Date well plugging began: 5-22-13 Date well plugging concluded: 5-22-13
- 5) GPS Well Location: Latitude: 36.693733 deg, _____ min, _____ sec
Longitude: -108.020946 deg, _____ min, _____ sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 10 ft below ground level (bgl),
by the following manner: Removed all well materials prior to abandonment
- 7) Static water level measured at initiation of plugging: 5.63 ft bgl (Casing full of soil to 4' BGS)
- 8) Date well plugging plan of operations was approved by the State Engineer: 5-13-13
- 9) Were all plugging activities consistent with an approved plugging plan? Yes _____ If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

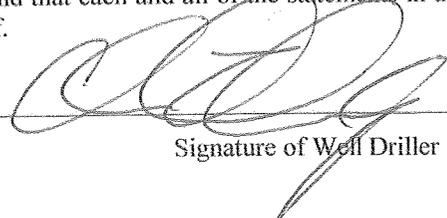
For each interval plugged, describe within the following columns:

<u>Depth</u> (ft bgl)	<u>Plugging Material Used</u> (include any additives used)	<u>Volume of Material Placed</u> (gallons)	<u>Theoretical Volume of Borehole/ Casing</u> (gallons)	<u>Placement Method</u> (tremie pipe, other)	<u>Comments</u> ("casing perforated first", "open annular space also plugged", etc.)
	Portland Type I/II Cement No Bentonite	20 Gallons	13.867 for open hole plugging after casing removed	Tremie Pipe and Pump	Well Casing Confirmed as 2" Dia. All well materials removed from borehole prior to plugging. First 5' of casing was overdrilled prior to removing casing string. Entire open hole was plugged.

MULTIPLY	BY	AND OBTAIN
cubic feet x	7.4805	= gallons
cubic yards x	201.97	= gallons

III. SIGNATURE:

I, Christopher Thornburg, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.



Signature of Well Driller

5-23-13

Date