

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-144 CLEZ
Revised August 1, 2011

For closed-loop systems that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, submit to the appropriate NMOCD District Office.

Closed-Loop System Permit or Closure Plan Application

(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

Type of action: ☒ Permit ☐ Closure

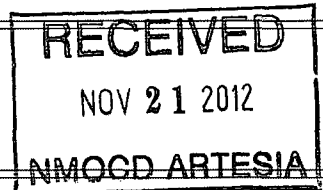
Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: Chevron U S A, Inc. OGRID #: 4323
Address: 15 Smith Road Midland, TX 79705
Facility or well name: WEST SHUGART 2 19 30 STATE 3H
API Number: 30-015-40842 OCD Permit Number: 213629
U/L or Qtr/Qtr D Section 2 Township 19 S Range 30 E County: EDDY
Center of Proposed Design: Latitude 32.693259 Longitude -103.95074 NAD: ☒ 1927 ☐ 1983
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Operation: ☒ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) ☐ P&A
☐ Above Ground Steel Tanks or ☒ Haul-off Bins

3.
Signs: Subsection C of 19.15.17.11 NMAC
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
☒ Signed in compliance with 19.15.16.8 NMAC



4.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.
☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☒ Closure Plan (Please complete Box 5) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
☐ Previously Approved Design (attach copy of design) API Number: _____
☐ Previously Approved Operating and Maintenance Plan API Number: _____

5.
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)
Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: CRI Disposal Facility Permit Number: NM-01-0006
Disposal Facility Name: Sundance Disposal Disposal Facility Permit Number: NM-01-0003

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☒ No

Required for impacted areas which will not be used for future service and operations:

- ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

6.
Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Bryan Arrant (Agent) Title: Regulatory Specialist II

Signature: [Signature] Date: 11/13/2012

e-mail address: bryan.arrant@chk.com Telephone: (405)935-3782

7. **OCD Approval:** ☒ Permit Application (including closure plan) ☐ Closure Plan (only)

OCD Representative Signature: ADade Approval Date: 11/26/12

Title: Dist # Supervisor OCD Permit Number: 213629

8. **Closure Report (required within 60 days of closure completion):** Subsection K of 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ Closure Completion Date: _____

9. **Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:**

Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Site Reclamation (Photo Documentation)

☐ Soil Backfilling and Cover Installation

☐ Re-vegetation Application Rates and Seeding Technique

10. **Operator Closure Certification:**

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: bryan.arrant@chk.com Telephone: _____

**Closed Loop System
WEST SHUGART 2 19 30 STATE 3H
Unit D, Sec. 2, T-19-S R-30-E
Eddy Co., NM
API # 30-015- _ _ _ _**

To use a closed loop system with roll-off steel pits for the maintenance of the drilling mud fluids and drill cuttings. Operator will maintain all solids and liquids within the closed loop system in a safe manner in order to protect public health and the environment.

Operations & Maintenance:

During each tour, the rig's drilling crew will inspect and monitor the drilling fluids contained within the steel pits and visually monitor any spill which may occur. Should a spill, release, or leak occur; the NMOCD District II office in Artesia (575-748-1283) will be notified. Please note that notifications may be made earlier to the district office should a greater release occur per NMOCD's rules.

Closure:

During and after drilling operations, drilling fluids and cuttings will be hauled to Controlled Recovery, Inc. Permit # NM-01-0006.

The alternative disposal facility will be Sundance Disposal. Permit # NM-01-0003

Permian District

**NM - Bone Spring Sand Project
West Shugart 2-19-30 State 3H
Well #1**

Wellbore #1

Plan: Plat 11/12/12

Standard Planning Report

19 November, 2012

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Site West Shugart 2-19-30 State 3H
Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	NM - Bone Spring Sand Project	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	West Shugart 2-19-30 State 3H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat 11/12/12		

Project	NM - Bone Spring Sand Project		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	West Shugart 2-19-30 State 3H
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Site Position:		Northing:	616,132.00 usft	Latitude:	32.693261
From:	Map	Easting:	617,857.00 usft	Longitude:	-103.950234
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.21 °

Well	Well #1				
Well Position	+N/-S	0.00 ft	Northing:	616,132.00 usft	Latitude: 32.693261
	+E/-W	0.00 ft	Easting:	617,857.00 usft	Longitude: -103.950234
Position Uncertainty	0.00 ft		Wellhead Elevation:		Ground Level: 0.00 ft

Wellbore	Wellbore #1
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	11/16/2012	7.62	60.55	48,782

Design	Plat 11/12/12
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Audit Notes:	
Version:	Phase: PROTOTYPE Tie On Depth: 0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	89.82

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,044.03	0.00	0.00	8,044.03	0.00	0.00	0.00	0.00	0.00	0.00	
8,793.20	89.90	89.82	8,521.49	1.50	476.63	12.00	12.00	0.00	89.82	
13,094.60	89.90	89.82	8,529.00	15.00	4,778.01	0.00	0.00	0.00	0.00	WS 2-19-30 3H- BH

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Site West Shugart 2-19-30 State 3H
Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	NM - Bone Spring-Sand Project	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	West Shugart 2-19-30 State 3H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat 11/12/12		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Site West Shugart 2-19-30 State 3H
Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	NM - Bone Spring Sand Project	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	West Shugart 2-19-30 State 3H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat 11/12/12		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,044.03	0.00	0.00	8,044.03	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	6.72	89.82	8,099.87	0.01	3.28	3.28	12.00	12.00	0.00
8,200.00	18.72	89.82	8,197.24	0.08	25.25	25.25	12.00	12.00	0.00
8,300.00	30.72	89.82	8,287.91	0.21	66.99	66.99	12.00	12.00	0.00
8,400.00	42.72	89.82	8,367.93	0.40	126.66	126.66	12.00	12.00	0.00
8,500.00	54.72	89.82	8,433.79	0.63	201.67	201.67	12.00	12.00	0.00
8,600.00	66.72	89.82	8,482.61	0.91	288.73	288.73	12.00	12.00	0.00
8,700.00	78.72	89.82	8,512.26	1.21	384.04	384.04	12.00	12.00	0.00
8,793.20	89.90	89.82	8,521.49	1.50	476.63	476.63	12.00	12.00	0.00
8,800.00	89.90	89.82	8,521.50	1.52	483.43	483.44	0.00	0.00	0.00
8,900.00	89.90	89.82	8,521.68	1.83	583.43	583.44	0.00	0.00	0.00
9,000.00	89.90	89.82	8,521.85	2.15	683.43	683.44	0.00	0.00	0.00
9,100.00	89.90	89.82	8,522.03	2.46	783.43	783.44	0.00	0.00	0.00
9,200.00	89.90	89.82	8,522.20	2.77	883.43	883.44	0.00	0.00	0.00
9,300.00	89.90	89.82	8,522.38	3.09	983.43	983.44	0.00	0.00	0.00
9,400.00	89.90	89.82	8,522.55	3.40	1,083.43	1,083.44	0.00	0.00	0.00
9,500.00	89.90	89.82	8,522.73	3.72	1,183.43	1,183.44	0.00	0.00	0.00
9,600.00	89.90	89.82	8,522.90	4.03	1,283.43	1,283.44	0.00	0.00	0.00
9,700.00	89.90	89.82	8,523.08	4.34	1,383.43	1,383.44	0.00	0.00	0.00
9,800.00	89.90	89.82	8,523.25	4.66	1,483.43	1,483.44	0.00	0.00	0.00
9,900.00	89.90	89.82	8,523.42	4.97	1,583.43	1,583.44	0.00	0.00	0.00
10,000.00	89.90	89.82	8,523.60	5.28	1,683.43	1,683.43	0.00	0.00	0.00
10,100.00	89.90	89.82	8,523.77	5.60	1,783.43	1,783.43	0.00	0.00	0.00
10,200.00	89.90	89.82	8,523.95	5.91	1,883.43	1,883.43	0.00	0.00	0.00
10,300.00	89.90	89.82	8,524.12	6.23	1,983.42	1,983.43	0.00	0.00	0.00
10,400.00	89.90	89.82	8,524.30	6.54	2,083.42	2,083.43	0.00	0.00	0.00
10,500.00	89.90	89.82	8,524.47	6.85	2,183.42	2,183.43	0.00	0.00	0.00

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Site West Shugart 2-19-30 State 3H
Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	NM - Bone Spring Sand Project	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	West Shugart 2-19-30 State 3H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat 11/12/12		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,600.00	89.90	89.82	8,524.65	7.17	2,283.42	2,283.43	0.00	0.00	0.00
10,700.00	89.90	89.82	8,524.82	7.48	2,383.42	2,383.43	0.00	0.00	0.00
10,800.00	89.90	89.82	8,525.00	7.80	2,483.42	2,483.43	0.00	0.00	0.00
10,900.00	89.90	89.82	8,525.17	8.11	2,583.42	2,583.43	0.00	0.00	0.00
11,000.00	89.90	89.82	8,525.34	8.42	2,683.42	2,683.43	0.00	0.00	0.00
11,100.00	89.90	89.82	8,525.52	8.74	2,783.42	2,783.43	0.00	0.00	0.00
11,200.00	89.90	89.82	8,525.69	9.05	2,883.42	2,883.43	0.00	0.00	0.00
11,300.00	89.90	89.82	8,525.87	9.37	2,983.42	2,983.43	0.00	0.00	0.00
11,400.00	89.90	89.82	8,526.04	9.68	3,083.42	3,083.43	0.00	0.00	0.00
11,500.00	89.90	89.82	8,526.22	9.99	3,183.42	3,183.43	0.00	0.00	0.00
11,600.00	89.90	89.82	8,526.39	10.31	3,283.42	3,283.43	0.00	0.00	0.00
11,700.00	89.90	89.82	8,526.57	10.62	3,383.42	3,383.43	0.00	0.00	0.00
11,800.00	89.90	89.82	8,526.74	10.94	3,483.42	3,483.43	0.00	0.00	0.00
11,900.00	89.90	89.82	8,526.92	11.25	3,583.41	3,583.43	0.00	0.00	0.00
12,000.00	89.90	89.82	8,527.09	11.56	3,683.41	3,683.43	0.00	0.00	0.00
12,100.00	89.90	89.82	8,527.26	11.88	3,783.41	3,783.43	0.00	0.00	0.00
12,200.00	89.90	89.82	8,527.44	12.19	3,883.41	3,883.43	0.00	0.00	0.00
12,300.00	89.90	89.82	8,527.61	12.51	3,983.41	3,983.43	0.00	0.00	0.00
12,400.00	89.90	89.82	8,527.79	12.82	4,083.41	4,083.43	0.00	0.00	0.00
12,500.00	89.90	89.82	8,527.96	13.13	4,183.41	4,183.43	0.00	0.00	0.00
12,600.00	89.90	89.82	8,528.14	13.45	4,283.41	4,283.43	0.00	0.00	0.00
12,700.00	89.90	89.82	8,528.31	13.76	4,383.41	4,383.43	0.00	0.00	0.00
12,800.00	89.90	89.82	8,528.49	14.08	4,483.41	4,483.43	0.00	0.00	0.00
12,900.00	89.90	89.82	8,528.66	14.39	4,583.41	4,583.43	0.00	0.00	0.00
13,000.00	89.90	89.82	8,528.84	14.70	4,683.41	4,683.43	0.00	0.00	0.00
13,094.60	89.90	89.82	8,529.00	15.00	4,778.01	4,778.03	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
hit/miss target									
- Shape									
WS 2-19-30 3H- SHL-	0.00	0.00	8,521.00	0.00	0.00	616,132.00	617,857.00	32.693261	-103.950234
- plan misses target center by 198.02ft at 8405.82ft MD (8372.18 TVD, 0.41 N, 130.64 E)									
- Point									
WS 2-19-30 3H- BHL-	0.00	0.00	8,529.00	15.00	4,778.01	616,147.00	622,635.00	32.693253	-103.934703
- plan hits target center									
- Point									

Project: NM - Bone Spring Sand Project
Site: West Shugart 2-19-30 State 3H
Well: Well #1
Wellbore: Wellbore #1
Design Plat 11/12/12

PROJECT DETAILS: NM - Bone Spring Sand Project

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001

