

Submit 1 Copy To Appropriate District Office

District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-43108
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator OneEnergy Partners Operating, LLC		6. State Oil & Gas Lease No. VB-2117
3. Address of Operator 2929 Allen Parkway, Suite 200, Houston, TX 77019		7. Lease Name or Unit Agreement Name Parade BWY State Com
4. Well Location Unit Letter <u>D</u> : <u>200</u> feet from the <u>North</u> line and <u>2200</u> feet from the <u>East</u> line Section <u>2</u> Township <u>25S</u> Range <u>35E</u> NMPM County <u>Lea</u>		8. Well Number 1H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3252'		9. OGRID Number 372031
		10. Pool name or Wildcat: Upper Wolfcamp

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☒	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: ☐		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

OneEnergy Partners Operating, LLC (OEPO), Operator of the above captioned well, respectfully requests approval to extend the lateral and revise the target formation to the Wolfcamp A utilizing the casing design outlined below:

17 1/2" hole w/ 13 3/8" @ 850 ft
12 1/4" hole w/ 9 5/8" @ 4950 ft
8 3/4" hole w/ 7" @ 11,553 ft
6 1/8" hole w/ 4 1/2" @ 12,020 ft. (TVD) 19,185 ft. (MD)

Plats, Directional Plan and Cement Program attached.

OEPO is scheduled to spud this well on or around June 5th, 2017.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Rachael Overbey TITLE Consultant DATE 5/26/2017

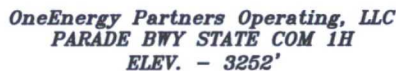
Type or print name Rachael Overbey E-mail address: rachaeloverbey@reenergygroup.com PHONE: 303-570-4057

For State Use Only

APPROVED BY: [Signature] TITLE Petroleum Engineer DATE 06/02/17
Conditions of Approval (if any):

basin
surveys

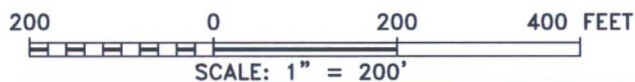
P.O. Box 1786 (575) 393-7316 - Office
1120 N. West County Rd. (575) 392-2206 - Fax
Hobbs, New Mexico 88241 basinsurveys.com



Lat - N 32°09'58.24"
Long - W 103°20'12.82"
NMSPCE- N 425617.9
E 849670.4
(NAD-83)

Lat - N 32°09'57.78"
Long - W 103°20'11.14"
NMSPCE- N 425559.2
E 808484.0
(NAD-27)

JAL, NM IS ± 9 MILES TO THE SOUTHEAST OF LOCATION.



Directions to Location:

FROM HWY 128 0.9 MILES FROM MILE MARKER 42
GO NORTH 4342.0 FEET THEN WEST 540.0 FEET TO
LOCATION.

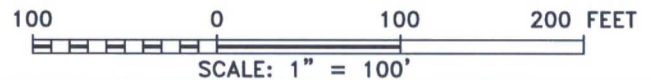
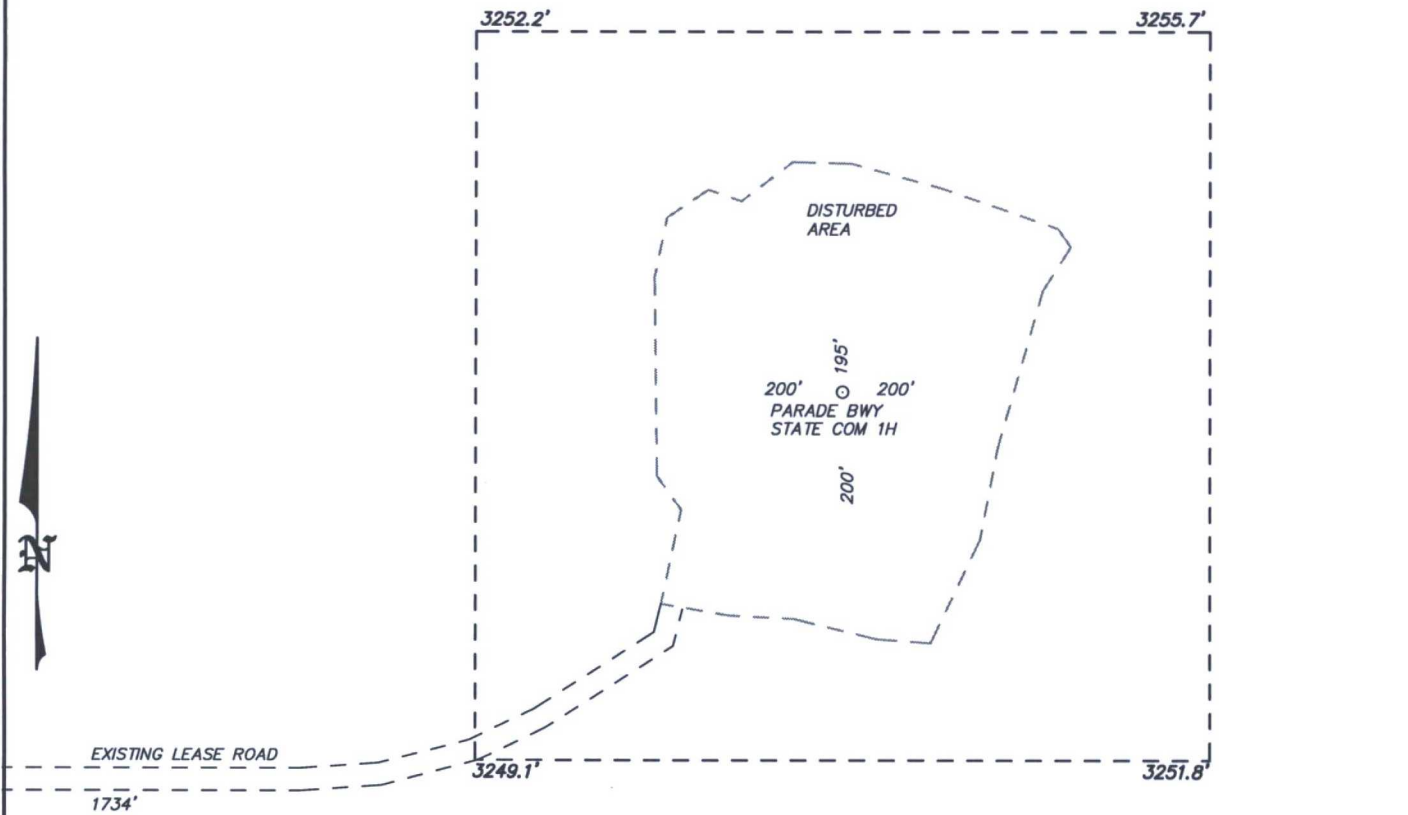
OneEnergy Partners Operating, LLC

REF: PARADE BWY STATE COM 1H / WELL PAD TOPO

THE PARADE BWY STATE COM 1H LOCATED 199' FROM
THE NORTH LINE AND 2200' FROM THE EAST LINE OF
SECTION 2, TOWNSHIP 25 SOUTH, RANGE 35 EAST.

N.M.P.M., LEA COUNTY, NEW MEXICO.

SECTION 2, TOWNSHIP 25 SOUTH, RANGE 35 EAST. N.M.P.M.,
LEA COUNTY, NEW MEXICO.



OneEnergy Partners Operating, LLC

REF: PARADE BWY STATE COM 1H / WELL PAD TOPO

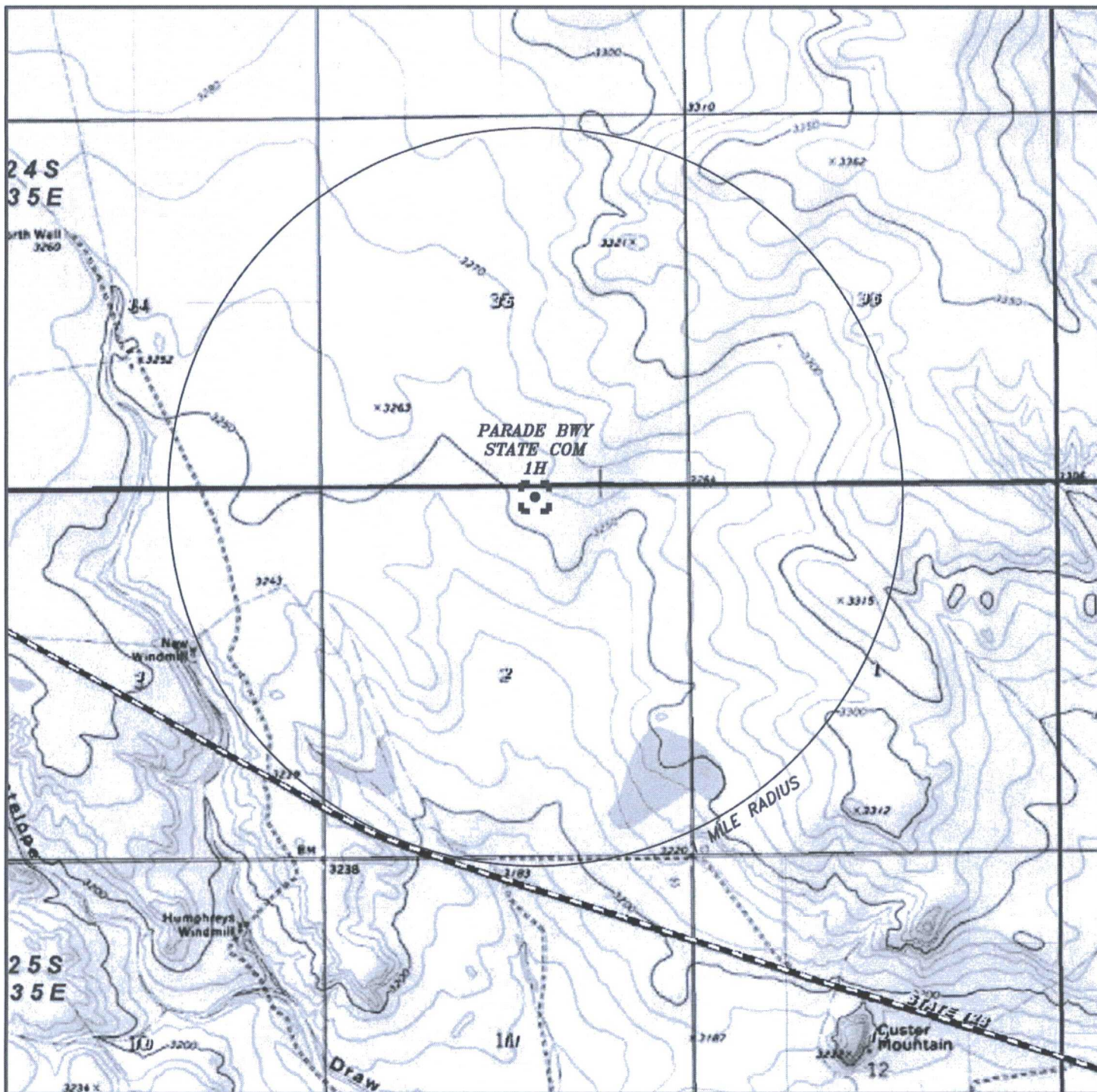
THE PARADE BWY STATE COM 1H LOCATED 199' FROM
THE NORTH LINE AND 2200' FROM THE EAST LINE OF
SECTION 2, TOWNSHIP 25 SOUTH, RANGE 35 EAST.

N.M.P.M., LEA COUNTY, NEW MEXICO.

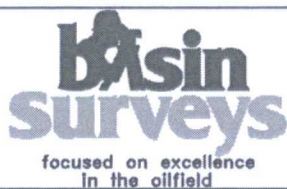
basin
surveys
focused on excellence
in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

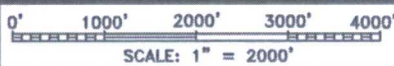
W.O. Number: 32853 Drawn By: J GOAD Date: 4-17-2017 Survey Date: 4-12-2017 Sheet 1 of 1 Sheets



PARADE BWY STATE COM 1H
 Located 199' FNL and 2200' FEL
 Section 2, Township 25 South, Range 35 East,
 N.M.P.M., Lea County, New Mexico.



P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (575) 393-7316 - Office
 (575) 392-2206 - Fax
basinsurveys.com



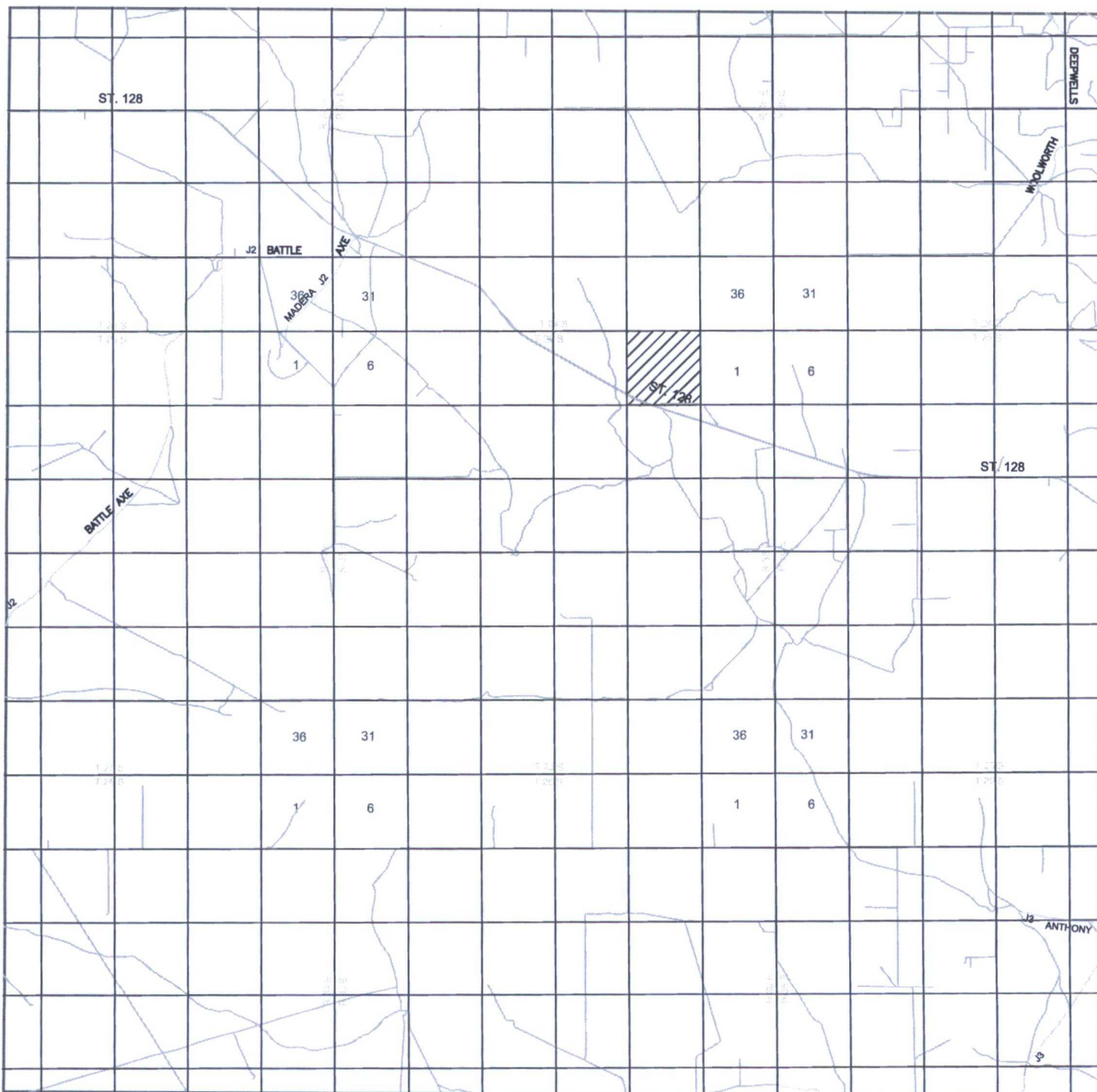
W.O. Number: JG 32853

Survey Date: 4-12-2017

YELLOW TINT - USA LAND
 BLUE TINT - STATE LAND
 NATURAL COLOR - FEE LAND



OneEnergy
 Partners
 Operating, LLC



PARADE BWY STATE COM 1H
 Located 199' FNL and 2200' FEL
 Section 2, Township 25 South, Range 35 East,
 N.M.P.M., Lea County, New Mexico.

basin
surveys
 focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (575) 393-7316 - Office
 (575) 392-2206 - Fax
 basin-surveys.com

0 1 MI 2 MI 3 MI 4 MI
 SCALE: 1" = 2 MILES

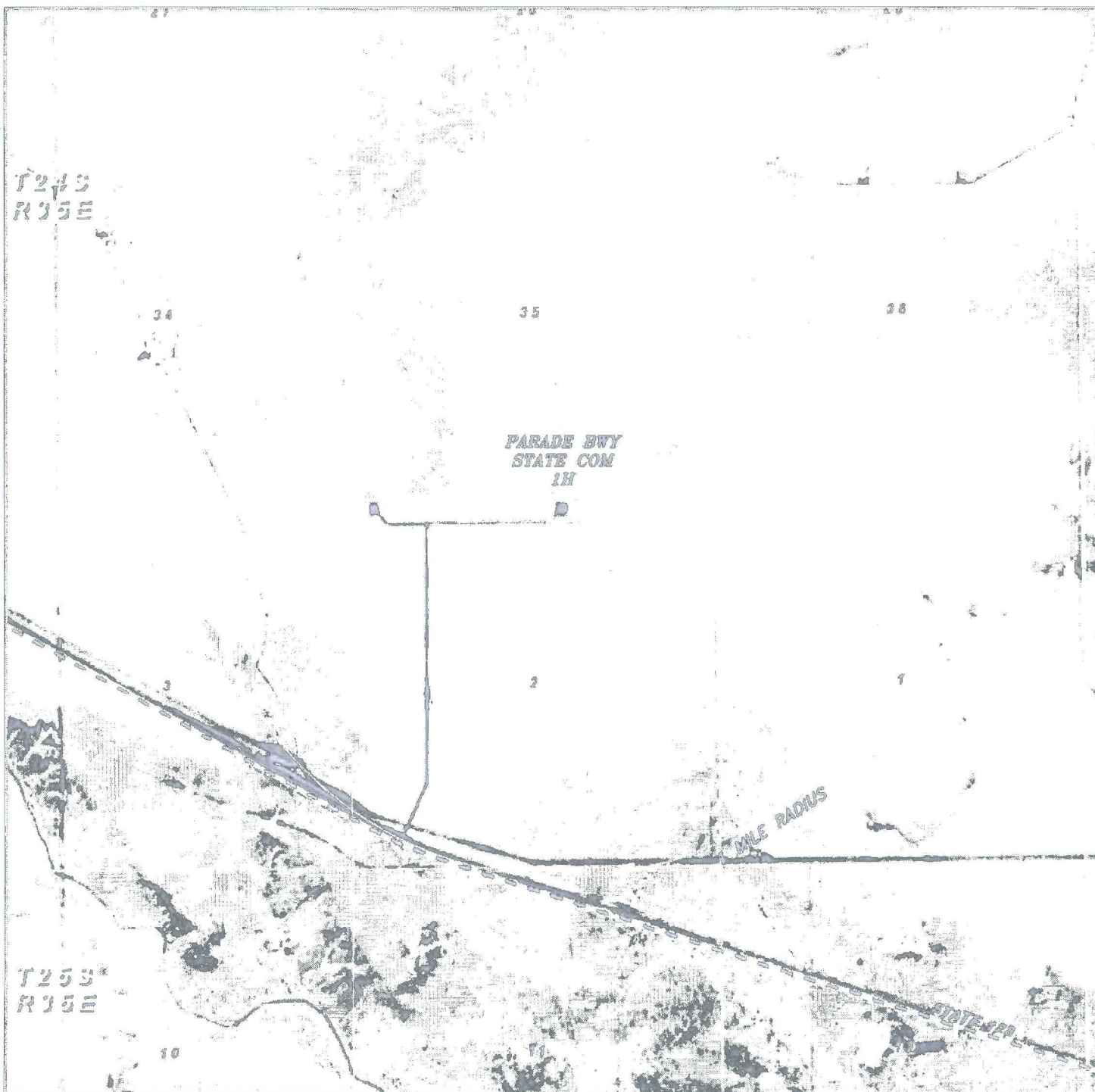
W.O. Number: JG 32853

Survey Date: 4-12-2017

YELLOW TINT - USA LAND
 BLUE TINT - STATE LAND
 NATURAL COLOR - FEE LAND



OneEnergy
 Partners
 Operating, LLC



PARADE BWY STATE COM 1H
 Located 199' FNL and 2200' FEL
 Section 2, Township 25 South, Range 35 East,
 N.M.P.M., Lea County, New Mexico.

basin
surveys
 focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (575) 393-7316 - Office
 (575) 392-2206 - Fax
 basin-surveys.com

0' 1000' 2000' 3000' 4000'

SCALE: 1" = 2000'

W.O. Number: JG 32853

Survey Date: 4-12-2017

YELLOW TINT - USA LAND

BLUE TINT - STATE LAND

NATURAL COLOR - FEE LAND

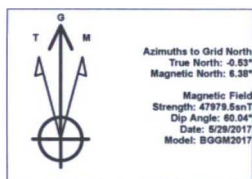
OneEnergy
 Partners
 Operating, LLC

One Energy Partners

WELL DETAILS: Parade BWY State Com 1H

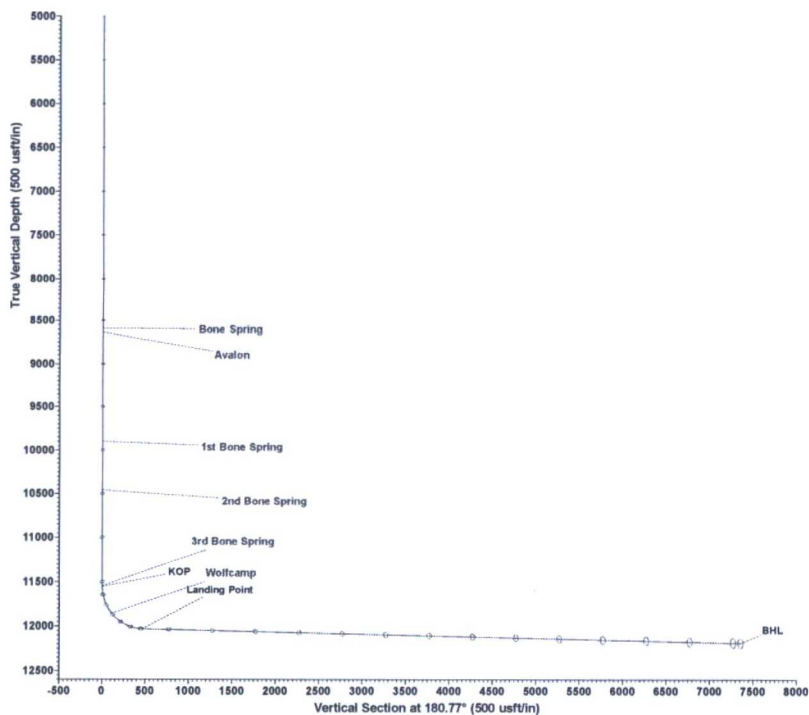
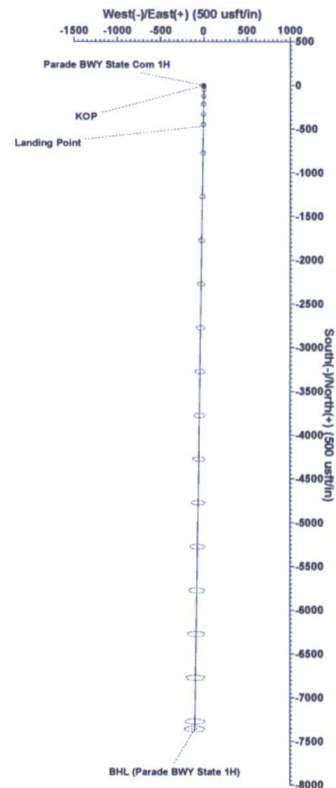
GL: 3252+25ft @ 3277 00usft (Precision 554)
Ground Level: 3252.00

			North	East	Lat	Long			
	0.00	0.00	425617.90	849670.40	32° 9' 58.239 N	103° 20' 12.816 W			
SECTION DETAILS Plan 1									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	11553.25	0.00	0.00	11553.25	0.00	0.00	0.00	0.00	KOP
3	12292.41	88.70	180.77	12030.59	-466.59	-6.23	12.00	466.63	Landing Point
4	19185.41	88.70	180.77	12186.97	-7357.20	-98.30	0.00	7357.86	BHL



Lea County, NM (NAD 83)
Parade BWY State
Parade BWY State Com 1H
199' FNL & 2200' FEL of Sec. 2
Wellbore #1
Plan 1
Precision 554
12,020' TVD, VS0' @ 88.70° Inc

HALLIBURTON | Sperry Drilling



Precision 554

One Energy Partners

Lea County, NM (NAD 83) Parade BWY State

API# 30-025-43108

Parade BWY State Com 1H

199' FNL & 2200' FEL of Sec. 2

Wellbore #1

Plan: Plan 1

Sperry Drilling Services

Combo Report

23 May, 2017

Well Coordinates: 32° 09' 58.24" N
103° 20' 12.82" W

North American Datum 1983
New Mexico Eastern Zone
425,617.90 N
849,670.40 E

Ground Level: 3,252.00 usft

Local Coordinate Origin:

Centered on Well Parade BWY State Com 1H
GL: 3252+25ft @ 3277.00usft (Precision 554)

Viewing Datum:

TVDs to System:

N

North Reference:

Grid

Unit System:

API US Survey Feet

Version: 5000.1 Build: 81

Report Version: Midcon Combo v1.11

HALLIBURTON

Plan Report for Parade BWY State Com 1H - Plan 1

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	TVD below System (usft)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Comments
					Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)			
0.00	0.00	0.00	-3,277.00	0.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
100.00	0.00	0.00	-3,177.00	100.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
200.00	0.00	0.00	-3,077.00	200.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
300.00	0.00	0.00	-2,977.00	300.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
400.00	0.00	0.00	-2,877.00	400.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
500.00	0.00	0.00	-2,777.00	500.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
600.00	0.00	0.00	-2,677.00	600.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
700.00	0.00	0.00	-2,577.00	700.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
730.00	0.00	0.00	-2,547.00	730.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	Rustler
800.00	0.00	0.00	-2,477.00	800.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
900.00	0.00	0.00	-2,377.00	900.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
1,000.00	0.00	0.00	-2,277.00	1,000.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
1,100.00	0.00	0.00	-2,177.00	1,100.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
1,115.00	0.00	0.00	-2,162.00	1,115.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	Top of Salt
1,200.00	0.00	0.00	-2,077.00	1,200.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
1,300.00	0.00	0.00	-1,977.00	1,300.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
1,400.00	0.00	0.00	-1,877.00	1,400.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
1,500.00	0.00	0.00	-1,777.00	1,500.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
1,600.00	0.00	0.00	-1,677.00	1,600.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
1,700.00	0.00	0.00	-1,577.00	1,700.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
1,800.00	0.00	0.00	-1,477.00	1,800.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
1,900.00	0.00	0.00	-1,377.00	1,900.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
2,000.00	0.00	0.00	-1,277.00	2,000.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
2,100.00	0.00	0.00	-1,177.00	2,100.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
2,200.00	0.00	0.00	-1,077.00	2,200.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
2,300.00	0.00	0.00	-977.00	2,300.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
2,400.00	0.00	0.00	-877.00	2,400.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
2,500.00	0.00	0.00	-777.00	2,500.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
2,600.00	0.00	0.00	-677.00	2,600.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
2,700.00	0.00	0.00	-577.00	2,700.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
2,800.00	0.00	0.00	-477.00	2,800.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
2,900.00	0.00	0.00	-377.00	2,900.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
3,000.00	0.00	0.00	-277.00	3,000.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
3,100.00	0.00	0.00	-177.00	3,100.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
3,200.00	0.00	0.00	-77.00	3,200.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
3,300.00	0.00	0.00	23.00	3,300.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
3,400.00	0.00	0.00	123.00	3,400.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
3,500.00	0.00	0.00	223.00	3,500.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
3,600.00	0.00	0.00	323.00	3,600.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
3,700.00	0.00	0.00	423.00	3,700.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
3,800.00	0.00	0.00	523.00	3,800.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	

HALLIBURTON

Plan Report for Parade BWY State Com 1H - Plan 1

Measured Depth	Inclination (°)	Grid Azimuth (°)	TVD below System (ustf)	Vertical Depth (ustf)	Local Coordinates Northing (ustf)	Easting (ustf)	Map Coordinates Northing (ustf)	Easting (ustf)	Dogleg Rate (°/100ustf)	Vertical Section (ustf)	Comments
3,900.00	0.00	0.00	623.00	3,900.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
4,000.00	0.00	0.00	723.00	4,000.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
4,100.00	0.00	0.00	823.00	4,100.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
4,200.00	0.00	0.00	923.00	4,200.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
4,300.00	0.00	0.00	1,023.00	4,300.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
4,400.00	0.00	0.00	1,123.00	4,400.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
4,500.00	0.00	0.00	1,223.00	4,500.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
4,520.00	0.00	0.00	1,243.00	4,520.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	Base of Salt
4,600.00	0.00	0.00	1,323.00	4,600.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
4,700.00	0.00	0.00	1,423.00	4,700.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
4,800.00	0.00	0.00	1,523.00	4,800.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
4,900.00	0.00	0.00	1,623.00	4,900.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
4,905.00	0.00	0.00	1,628.00	4,905.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	Delaware
5,000.00	0.00	0.00	1,723.00	5,000.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
5,100.00	0.00	0.00	1,823.00	5,100.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
5,200.00	0.00	0.00	1,923.00	5,200.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
5,300.00	0.00	0.00	2,023.00	5,300.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
5,400.00	0.00	0.00	2,123.00	5,400.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
5,500.00	0.00	0.00	2,223.00	5,500.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
5,600.00	0.00	0.00	2,323.00	5,600.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
5,700.00	0.00	0.00	2,423.00	5,700.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
5,800.00	0.00	0.00	2,523.00	5,800.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
5,900.00	0.00	0.00	2,623.00	5,900.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
6,000.00	0.00	0.00	2,723.00	6,000.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
6,100.00	0.00	0.00	2,823.00	6,100.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
6,200.00	0.00	0.00	2,923.00	6,200.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
6,300.00	0.00	0.00	3,023.00	6,300.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
6,400.00	0.00	0.00	3,123.00	6,400.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
6,500.00	0.00	0.00	3,223.00	6,500.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
6,600.00	0.00	0.00	3,323.00	6,600.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
6,700.00	0.00	0.00	3,423.00	6,700.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
6,800.00	0.00	0.00	3,523.00	6,800.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
6,900.00	0.00	0.00	3,623.00	6,900.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
7,000.00	0.00	0.00	3,723.00	7,000.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
7,100.00	0.00	0.00	3,823.00	7,100.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
7,200.00	0.00	0.00	3,923.00	7,200.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
7,300.00	0.00	0.00	4,023.00	7,300.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
7,400.00	0.00	0.00	4,123.00	7,400.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
7,500.00	0.00	0.00	4,223.00	7,500.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
7,600.00	0.00	0.00	4,323.00	7,600.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
7,700.00	0.00	0.00	4,423.00	7,700.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	

Plan Report for Parade BWY State Com 1H - Plan 1

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	TVD below System (usft)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Comments
					Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)			
7,800.00	0.00	0.00	4,523.00	7,800.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
7,900.00	0.00	0.00	4,623.00	7,900.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
8,000.00	0.00	0.00	4,723.00	8,000.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
8,100.00	0.00	0.00	4,823.00	8,100.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
8,200.00	0.00	0.00	4,923.00	8,200.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
8,300.00	0.00	0.00	5,023.00	8,300.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
8,400.00	0.00	0.00	5,123.00	8,400.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
8,500.00	0.00	0.00	5,223.00	8,500.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
8,585.00	0.00	0.00	5,308.00	8,585.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	Bone Spring
8,600.00	0.00	0.00	5,323.00	8,600.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
8,630.00	0.00	0.00	5,353.00	8,630.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	Avalon
8,700.00	0.00	0.00	5,423.00	8,700.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
8,800.00	0.00	0.00	5,523.00	8,800.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
8,900.00	0.00	0.00	5,623.00	8,900.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
9,000.00	0.00	0.00	5,723.00	9,000.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
9,100.00	0.00	0.00	5,823.00	9,100.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
9,200.00	0.00	0.00	5,923.00	9,200.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
9,300.00	0.00	0.00	6,023.00	9,300.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
9,400.00	0.00	0.00	6,123.00	9,400.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
9,500.00	0.00	0.00	6,223.00	9,500.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
9,600.00	0.00	0.00	6,323.00	9,600.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
9,700.00	0.00	0.00	6,423.00	9,700.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
9,800.00	0.00	0.00	6,523.00	9,800.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
9,900.00	0.00	0.00	6,623.00	9,900.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	1st Bone Spring
10,000.00	0.00	0.00	6,723.00	10,000.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
10,100.00	0.00	0.00	6,823.00	10,100.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
10,200.00	0.00	0.00	6,923.00	10,200.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
10,300.00	0.00	0.00	7,023.00	10,300.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
10,400.00	0.00	0.00	7,123.00	10,400.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
10,460.00	0.00	0.00	7,183.00	10,460.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	2nd Bone Spring
10,500.00	0.00	0.00	7,223.00	10,500.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
10,600.00	0.00	0.00	7,323.00	10,600.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
10,700.00	0.00	0.00	7,423.00	10,700.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
10,800.00	0.00	0.00	7,523.00	10,800.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
10,900.00	0.00	0.00	7,623.00	10,900.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
11,000.00	0.00	0.00	7,723.00	11,000.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
11,100.00	0.00	0.00	7,823.00	11,100.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
11,200.00	0.00	0.00	7,923.00	11,200.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
11,300.00	0.00	0.00	8,023.00	11,300.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
11,400.00	0.00	0.00	8,123.00	11,400.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
11,500.00	0.00	0.00	8,223.00	11,500.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	

HALLIBURTON

One Energy Partners
Lea County, NM (NAD 83)

Plan Report for Parade BWY State Com 1H - Plan 1

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	TVD below System (usft)	Vertical Depth (usft)	Local Coordinates Northing (usft)	Easting (usft)	Map Coordinates Northing (usft)	Easting (usft)	Dogleg Rate (°/100usft)	Vertical Section (usft)	Comments
11,545.00	0.00	0.00	8,268.00	11,545.00	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	3rd Bone Spring KOP
11,553.25	0.00	0.00	8,276.25	11,553.25	0.00 N	0.00 E	425,617.90	849,670.40	0.00	0.00	
11,575.00	2.61	180.77	8,297.99	11,574.99	0.50 S	0.01 W	425,617.40	849,670.39	12.00	0.50	
11,600.00	5.61	180.77	8,322.93	11,599.93	2.29 S	0.03 W	425,615.61	849,670.37	12.00	2.29	
11,625.00	8.61	180.77	8,347.73	11,624.73	5.38 S	0.07 W	425,612.52	849,670.33	12.00	5.38	
11,650.00	11.61	180.77	8,372.34	11,649.34	9.77 S	0.13 W	425,608.13	849,670.27	12.00	9.77	
11,675.00	14.61	180.77	8,396.68	11,673.68	15.44 S	0.21 W	425,602.46	849,670.19	12.00	15.44	
11,700.00	17.61	180.77	8,420.70	11,697.70	22.37 S	0.30 W	425,595.53	849,670.10	12.00	22.38	
11,725.00	20.61	180.77	8,444.32	11,721.32	30.56 S	0.41 W	425,587.34	849,669.99	12.00	30.56	
11,750.00	23.61	180.77	8,467.48	11,744.48	39.96 S	0.53 W	425,577.94	849,669.87	12.00	39.97	
11,775.00	26.61	180.77	8,490.11	11,767.11	50.57 S	0.68 W	425,567.33	849,669.72	12.00	50.58	
11,800.00	29.61	180.77	8,512.16	11,789.16	62.35 S	0.83 W	425,555.55	849,669.57	12.00	62.35	
11,825.00	32.61	180.77	8,533.56	11,810.56	75.26 S	1.01 W	425,542.64	849,669.39	12.00	75.27	
11,850.00	35.61	180.77	8,554.26	11,831.26	89.28 S	1.19 W	425,528.62	849,669.21	12.00	89.29	
11,875.00	38.61	180.77	8,574.20	11,851.20	104.36 S	1.39 W	425,513.54	849,669.01	12.00	104.37	
11,883.10	39.56	180.77	8,580.48	11,857.48	109.47 S	1.46 W	425,508.43	849,668.94	12.00	109.48	Wellcamp
11,900.00	41.61	180.77	8,593.31	11,870.31	120.46 S	1.61 W	425,497.44	849,668.79	12.00	120.47	
11,925.00	44.61	180.77	8,611.56	11,888.56	137.55 S	1.84 W	425,480.35	849,668.56	12.00	137.56	
11,950.00	47.61	180.77	8,628.89	11,905.89	155.56 S	2.08 W	425,462.34	849,668.32	12.00	155.57	
11,975.00	50.61	180.77	8,645.26	11,922.26	174.45 S	2.33 W	425,443.45	849,668.07	12.00	174.47	
12,000.00	53.61	180.77	8,660.61	11,937.61	194.18 S	2.59 W	425,423.72	849,667.81	12.00	194.20	
12,025.00	56.61	180.77	8,674.91	11,951.91	214.68 S	2.87 W	425,403.22	849,667.53	12.00	214.70	
12,050.00	59.61	180.77	8,688.11	11,966.11	235.90 S	3.15 W	425,382.00	849,667.25	12.00	235.93	
12,075.00	62.61	180.77	8,700.19	11,977.19	257.79 S	3.44 W	425,360.11	849,666.96	12.00	257.81	
12,100.00	65.61	180.77	8,711.10	11,988.10	280.28 S	3.74 W	425,337.62	849,666.66	12.00	280.30	
12,125.00	68.61	180.77	8,720.83	11,997.83	303.30 S	4.05 W	425,314.60	849,666.35	12.00	303.33	
12,150.00	71.61	180.77	8,729.33	12,006.33	326.81 S	4.37 W	425,291.09	849,666.03	12.00	326.83	
12,175.00	74.61	180.77	8,735.59	12,013.59	350.22 S	4.69 W	425,267.18	849,665.71	12.00	350.25	
12,200.00	77.61	180.77	8,742.59	12,019.59	374.99 S	5.01 W	425,242.91	849,665.39	12.00	375.02	
12,225.00	80.61	180.77	8,747.32	12,024.32	399.53 S	5.34 W	425,218.37	849,665.06	12.00	399.57	
12,250.00	83.61	180.77	8,750.75	12,027.75	424.29 S	5.67 W	425,193.61	849,664.73	12.00	424.33	
12,275.00	86.61	180.77	8,752.88	12,029.88	449.19 S	6.00 W	425,168.71	849,664.40	12.00	449.23	
12,292.41	88.70	180.77	8,753.59	12,030.59	466.59 S	6.23 W	425,151.31	849,664.17	12.00	466.63	Landing Point
12,300.00	88.70	180.77	8,753.76	12,030.76	474.17 S	6.34 W	425,143.73	849,664.06	0.00	474.22	
12,400.00	88.70	180.77	8,756.03	12,033.03	574.14 S	7.67 W	425,043.76	849,662.73	0.00	574.19	
12,500.00	88.70	180.77	8,758.30	12,035.30	674.10 S	9.01 W	424,943.80	849,661.39	0.00	674.16	
12,600.00	88.70	180.77	8,760.57	12,037.57	774.07 S	10.34 W	424,843.83	849,660.06	0.00	774.14	
12,700.00	88.70	180.77	8,762.84	12,039.84	874.04 S	11.68 W	424,743.86	849,658.72	0.00	874.11	
12,800.00	88.70	180.77	8,765.11	12,042.11	974.00 S	13.01 W	424,643.90	849,657.39	0.00	974.09	
12,900.00	88.70	180.77	8,767.37	12,044.37	1,073.97 S	14.35 W	424,543.93	849,656.05	0.00	1,074.06	
13,000.00	88.70	180.77	8,769.64	12,046.64	1,173.93 S	15.68 W	424,443.97	849,654.72	0.00	1,174.04	

Plan Report for Parade BWY State Com 1H - Plan 1

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	TVD below System (usft)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Comments
					Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)			
13,100.00	88.70	180.77	8,771.91	12,048.91	1,273.90 S	17.02 W	424,344.00	849,653.38	0.00	1,274.01	
13,200.00	88.70	180.77	8,774.18	12,051.18	1,373.86 S	18.36 W	424,244.04	849,652.04	0.00	1,373.98	
13,300.00	88.70	180.77	8,776.45	12,053.45	1,473.83 S	19.69 W	424,144.07	849,650.71	0.00	1,473.96	
13,400.00	88.70	180.77	8,778.72	12,055.72	1,573.79 S	21.03 W	424,044.11	849,649.37	0.00	1,573.93	
13,500.00	88.70	180.77	8,780.99	12,057.99	1,673.76 S	22.36 W	423,944.14	849,648.04	0.00	1,673.91	
13,600.00	88.70	180.77	8,783.26	12,060.26	1,773.72 S	23.70 W	423,844.18	849,646.70	0.00	1,773.88	
13,700.00	88.70	180.77	8,785.52	12,062.52	1,873.69 S	25.03 W	423,744.21	849,645.37	0.00	1,873.86	
13,800.00	88.70	180.77	8,787.79	12,064.79	1,973.65 S	26.37 W	423,644.25	849,644.03	0.00	1,973.83	
13,900.00	88.70	180.77	8,790.06	12,067.06	2,073.62 S	27.71 W	423,544.28	849,642.69	0.00	2,073.80	
14,000.00	88.70	180.77	8,792.33	12,069.33	2,173.58 S	29.04 W	423,444.32	849,641.36	0.00	2,173.78	
14,100.00	88.70	180.77	8,794.60	12,071.60	2,273.55 S	30.38 W	423,344.35	849,640.02	0.00	2,273.75	
14,200.00	88.70	180.77	8,796.87	12,073.87	2,373.52 S	31.71 W	423,244.38	849,638.69	0.00	2,373.73	
14,300.00	88.70	180.77	8,799.14	12,076.14	2,473.48 S	33.05 W	423,144.42	849,637.35	0.00	2,473.70	
14,400.00	88.70	180.77	8,801.40	12,078.40	2,573.45 S	34.38 W	423,044.45	849,636.02	0.00	2,573.68	
14,500.00	88.70	180.77	8,803.67	12,080.67	2,673.41 S	35.72 W	422,944.49	849,634.68	0.00	2,673.65	
14,600.00	88.70	180.77	8,805.94	12,082.94	2,773.38 S	37.06 W	422,844.52	849,633.34	0.00	2,773.62	
14,700.00	88.70	180.77	8,808.21	12,085.21	2,873.34 S	38.39 W	422,744.56	849,632.01	0.00	2,873.60	
14,800.00	88.70	180.77	8,810.48	12,087.48	2,973.31 S	39.73 W	422,644.59	849,630.67	0.00	2,973.57	
14,900.00	88.70	180.77	8,812.75	12,089.75	3,073.27 S	41.06 W	422,544.63	849,629.34	0.00	3,073.55	
15,000.00	88.70	180.77	8,815.02	12,092.02	3,173.24 S	42.40 W	422,444.66	849,628.00	0.00	3,173.52	
15,100.00	88.70	180.77	8,817.29	12,094.29	3,273.20 S	43.73 W	422,344.70	849,626.67	0.00	3,273.50	
15,200.00	88.70	180.77	8,819.55	12,096.55	3,373.17 S	45.07 W	422,244.73	849,625.33	0.00	3,373.47	
15,300.00	88.70	180.77	8,821.82	12,098.82	3,473.13 S	46.40 W	422,144.77	849,624.00	0.00	3,473.44	
15,400.00	88.70	180.77	8,824.09	12,101.09	3,573.10 S	47.74 W	422,044.80	849,622.66	0.00	3,573.42	
15,500.00	88.70	180.77	8,826.36	12,103.36	3,673.06 S	49.08 W	421,944.84	849,621.32	0.00	3,673.39	
15,600.00	88.70	180.77	8,828.63	12,105.63	3,773.03 S	50.41 W	421,844.87	849,619.99	0.00	3,773.37	
15,700.00	88.70	180.77	8,830.90	12,107.90	3,873.00 S	51.75 W	421,744.90	849,618.65	0.00	3,873.34	
15,800.00	88.70	180.77	8,833.17	12,110.17	3,972.96 S	53.08 W	421,644.94	849,617.32	0.00	3,973.32	
15,900.00	88.70	180.77	8,835.44	12,112.44	4,072.93 S	54.42 W	421,544.97	849,615.98	0.00	4,073.29	
16,000.00	88.70	180.77	8,837.70	12,114.70	4,172.89 S	55.75 W	421,445.01	849,614.65	0.00	4,173.26	
16,100.00	88.70	180.77	8,839.97	12,116.97	4,272.86 S	57.09 W	421,345.04	849,613.31	0.00	4,273.24	
16,200.00	88.70	180.77	8,842.24	12,119.24	4,372.82 S	58.43 W	421,245.08	849,611.97	0.00	4,373.21	
16,300.00	88.70	180.77	8,844.51	12,121.51	4,472.79 S	59.76 W	421,145.11	849,610.64	0.00	4,473.19	
16,400.00	88.70	180.77	8,846.78	12,123.78	4,572.75 S	61.10 W	421,045.15	849,609.30	0.00	4,573.16	
16,500.00	88.70	180.77	8,849.05	12,126.05	4,672.72 S	62.43 W	420,945.18	849,607.97	0.00	4,673.14	
16,600.00	88.70	180.77	8,851.32	12,128.32	4,772.68 S	63.77 W	420,845.22	849,606.63	0.00	4,773.11	
16,700.00	88.70	180.77	8,853.59	12,130.59	4,872.65 S	65.10 W	420,745.25	849,605.30	0.00	4,873.08	
16,800.00	88.70	180.77	8,855.85	12,132.85	4,972.61 S	66.44 W	420,645.29	849,603.96	0.00	4,973.06	
16,900.00	88.70	180.77	8,858.12	12,135.12	5,072.58 S	67.78 W	420,545.32	849,602.62	0.00	5,073.03	
17,000.00	88.70	180.77	8,860.39	12,137.39	5,172.54 S	69.11 W	420,445.36	849,601.29	0.00	5,173.01	
17,100.00	88.70	180.77	8,862.66	12,139.66	5,272.51 S	70.45 W	420,345.39	849,599.95	0.00	5,272.98	

Plan Report for Parade BWY State Com 1H - Plan 1

Measured Depth (usft)	Inclination (")	Grid Azimuth (")	TVD below System (usft)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Comments
					Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)			
17,200.00	88.70	180.77	8,864.93	12,141.93	5,372.48 S	71.78 W	420,245.42	849,598.62	0.00	5,372.96	
17,300.00	88.70	180.77	8,867.20	12,144.20	5,472.44 S	73.12 W	420,145.46	849,597.28	0.00	5,472.93	
17,400.00	88.70	180.77	8,869.47	12,146.47	5,572.41 S	74.45 W	420,045.49	849,595.95	0.00	5,572.90	
17,500.00	88.70	180.77	8,871.74	12,148.74	5,672.37 S	75.79 W	419,945.53	849,594.61	0.00	5,672.88	
17,600.00	88.70	180.77	8,874.00	12,151.00	5,772.34 S	77.12 W	419,845.56	849,593.28	0.00	5,772.85	
17,700.00	88.70	180.77	8,876.27	12,153.27	5,872.30 S	78.46 W	419,745.60	849,591.94	0.00	5,872.83	
17,800.00	88.70	180.77	8,878.54	12,155.54	5,972.27 S	79.80 W	419,645.63	849,590.60	0.00	5,972.80	
17,900.00	88.70	180.77	8,880.81	12,157.81	6,072.23 S	81.13 W	419,545.67	849,589.27	0.00	6,072.77	
18,000.00	88.70	180.77	8,883.08	12,160.08	6,172.20 S	82.47 W	419,445.70	849,587.93	0.00	6,172.75	
18,100.00	88.70	180.77	8,885.35	12,162.35	6,272.16 S	83.80 W	419,345.74	849,586.60	0.00	6,272.72	
18,200.00	88.70	180.77	8,887.62	12,164.62	6,372.13 S	85.14 W	419,245.77	849,585.26	0.00	6,372.70	
18,300.00	88.70	180.77	8,889.89	12,166.89	6,472.09 S	86.47 W	419,145.81	849,583.93	0.00	6,472.67	
18,400.00	88.70	180.77	8,892.15	12,169.15	6,572.06 S	87.81 W	419,045.84	849,582.59	0.00	6,572.65	
18,500.00	88.70	180.77	8,894.42	12,171.42	6,672.02 S	89.15 W	418,945.88	849,581.25	0.00	6,672.62	
18,600.00	88.70	180.77	8,896.69	12,173.69	6,771.99 S	90.48 W	418,845.91	849,579.92	0.00	6,772.59	
18,700.00	88.70	180.77	8,898.96	12,175.96	6,871.96 S	91.82 W	418,745.94	849,578.58	0.00	6,872.57	
18,800.00	88.70	180.77	8,901.23	12,178.23	6,971.92 S	93.15 W	418,645.98	849,577.25	0.00	6,972.54	
18,900.00	88.70	180.77	8,903.50	12,180.50	7,071.89 S	94.49 W	418,546.01	849,575.91	0.00	7,072.52	
19,000.00	88.70	180.77	8,905.77	12,182.77	7,171.85 S	95.82 W	418,446.05	849,574.58	0.00	7,172.49	
19,100.00	88.70	180.77	8,908.04	12,185.04	7,271.82 S	97.16 W	418,346.08	849,573.24	0.00	7,272.47	
19,185.41	88.70	180.77	8,909.97	12,186.97	7,357.20 S	98.30 W	418,260.70	849,572.10	0.00	7,357.86	BHL

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,553.25	11,553.25	0.00	0.00	KOP
12,292.41	12,030.59	-466.59	-6.23	Landing Point
19,185.41	12,186.97	-7,357.20	-98.30	BHL

Vertical Section Information

Angle Type	Target	Azimuth (")	Origin Type	Origin		Start TVD (usft)
				+N/-S (usft)	+E/-W (usft)	
Target	BHL (Parade BWY State 1H)	180.77	Slot	0.00	0.00	0.00

Plan Report for Parade BWY State Com 1H - Plan 1

Survey tool program

From (usft)	To (usft)	Survey/Plan	Survey Tool
0.00	19,185.41	Plan 1	MWD+SC

Casing Details

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
850.00	850.00	13 3/8"	13-3/8	17-1/2

Formation Details

Measured Depth (usft)	Vertical Depth (usft)	TVDSS (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
730.00	730.00	-2,547.00	Rustler		1.30	179.31
1,115.00	1,115.00	-2,162.00	Top of Salt		1.30	179.31
4,520.00	4,520.00	1,243.00	Base of Salt		1.30	179.31
4,905.00	4,905.00	1,628.00	Delaware		1.30	179.31
8,585.00	8,585.00	5,308.00	Bone Spring		1.30	179.31
8,630.00	8,630.00	5,353.00	Avalon		1.30	179.31
9,900.00	9,900.00	6,623.00	1st Bone Spring		1.30	179.31
10,460.00	10,460.00	7,183.00	2nd Bone Spring		1.30	179.31
11,545.00	11,545.00	8,268.00	3rd Bone Spring		1.30	179.31
11,883.10	11,855.00	8,578.00	Wolfcamp		1.30	179.31

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
BHL (Parade BWY State 1H) ()	0.00	0.00	12,186.97	-7,357.20	-98.30	418,260.70	849,572.10	32° 8' 45.451 N	103° 20' 14.751 W
- plan hits target center									
- Point									

HALLIBURTON

One Energy Partners
Lea County, NM (NAD 83)

Plan Report for Parade BWY State Com 1H - Plan 1

Directional Difficulty Index

Average Dogleg over Survey:	0.53 °/100usft	Maximum Dogleg over Survey:	12.00 °/100usft at 12,292.41 usft
Net Tortosity applicable to Plans:	0.53 °/100usft	Directional Difficulty Index:	6.321

Audit Info

North Reference Sheet for Parade BWY State - Parade BWY State Com 1H - Wellbore #1

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to GL:3252+25ft @ 3277.00usft (Precision 554). Northing and Easting are relative to Parade BWY State Com 1H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone using datum North American Datum 1983, ellipsoid GRS 1980

Projection method is Transverse Mercator (Gauss-Kruger)

Central Meridian is 104° 20' 0.000 W°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:0° 0' 0.000 N°

False Easting: 541,337.50usft, False Northing: 0.00usft, Scale Reduction: 1.00001798

Grid Coordinates of Well: 425,617.90 usft N, 849,670.40 usft E

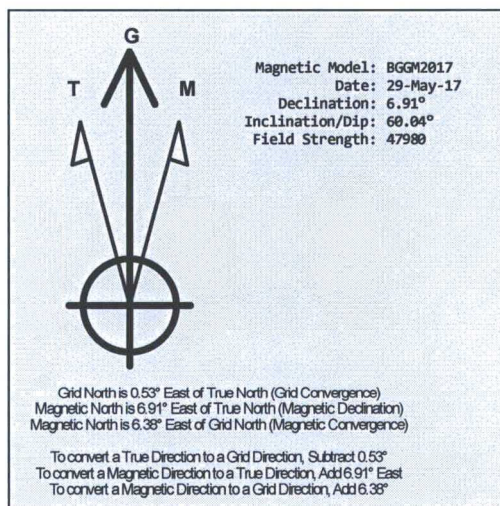
Geographical Coordinates of Well: 32° 09' 58.24" N, 103° 20' 12.82" W

Grid Convergence at Surface is: 0.53°

Based upon Minimum Curvature type calculations, at a Measured Depth of 19,185.41usft

the Bottom Hole Displacement is 7,357.86usft in the Direction of 180.77° (Grid).

Magnetic Convergence at surface is: -6.38° (29 May 2017, , BGGM2017)





Geologic Well Prognosis
PARADE BWY STATE COM 1H

Prepared By:
Date:
Geologist:
Engineer:

Greg Clark
4/14/2017
Greg Clark; (c.) 713-819-3129
Vladimir Roudakov; (c.) 720-933-9784

	Surface/Bottom Hole	FNL	FSL	FEL	FWL
Surface	Sec. 2 T25S R35E	199'		2200'	
BHL	Sec. 11 T25S R35E	2290'		2290'	
Side-track					
Side-track					

Proposed Well: PARADE BWY STATE COM 1H
Legals: NWNE Sec. 2 T25S R35E
API: 30-025-43108
Lat/Long (Nad 83): 32°08'45.45", 103° 20' 14.75"
County and State: Lea Co., NM
Ground Elev (FEET): 3252
Kelly Bushing Elev (FEET): 3277

Vertical Correlation Well: Oxy Banana Girl Fed 2
Legals: NE1/4 SW1/4 W1/2 Sec10 T25S R35E
API: 30-025-35322
Lat/Long (Nad 83): 32.1430359, -103.357058
County and State: Lea Co., NM
Ground Elev: 3235
Kelly Bushing Elev: 3259

Formations	Lithology	TVD (RKB)	(calc)		Sample Top	Δft	(calc)		Actual Log	Δft	(calc)		Adjusted Prog Top	TVD (RKB)	(calc)	
			KB: 3277	Iso to Target			Sample <Lo Hi>				Log <Lo Hi>				KB: xxxx	Iso to Target
Rustler	Mixed lithologies	730	2547	11290		730				730				0		
Top of Salt	Salt (Halite)	1115	2162	10905		1115				1115				0		
Base of Salt	Limestone/Anhydrite	4520	-1243	7500		4520				4520				0		
Delaware	Sand/Siltstone/Shale/Limestone	4905	-1628	7115		4905				4905				0		
Bone Spring	Limestone	8585	-5308	3435		8585				8585				0		
Avalon	Shale	8630	-5353	3390		8630				8630				0		
1st Bone Spring	Sand/Siltstone/Shale/Limestone	9900	-6623	2120		9900				9900				0		
2nd Bone Spring	Sand/Siltstone/Shale/Limestone	10460	-7183	1560		10460				10460				0		
3rd Bone Spring	Siltstone	11545	-8268	475		11545				11545				0		
Wolfcamp	Shale/Limestone	11855	-8578	165		11855				11855						
Target (0 KBTVD @ 88.7")		12020	-8743	0		12020				12020						
						0				0				0		
SURFACE CASING POINT		850	2427	11170												
INT. CASING POINT		4950	-1673	7070												

MUDLOGGING

ELECTRIC LOGS

Open hole logs will not be run.

DIRECTIONAL
PLANNING

(Hard Lines)
(Target Dimension)
(DST)

2 Surface Casing

2.1 Job Information Surface Casing

Job Criticality Status: GREEN

Well Name: PARADE BWY STATE

Well #: 1H

17-1/2" Hole

0 - 850 ft (MD)

Inner Diameter

17.5 in

Excess Factor

60 %

Surface Casing

0 - 850 ft (MD)

Outer Diameter

13.375 in

Inner Diameter

12.615 in

Linear Weight

54.5 lbm/ft

Casing Grade

J-55

Shoe Joint Length

40 ft

Mud Type

Spud Mud

Mud Weight

8.4 lbm/gal

2.2 *Estimated Calculations* *Surface Casing*

Stage 1

CEMENT: (550 ft fill)

550 ft * 0.6946 ft ³ /ft * 60 %	= 611.28 ft ³
ExtendaCem™ CZ	= 611.28 ft ³
	= 108.9 bbl
Total Lead	= 353.84 sack

CEMENT: (300 ft fill)

300 ft * 0.6946 ft ³ /ft * 60 %	= 333.43 ft ³
HalCem™ C	= 333.43 ft ³
	= 59.4 bbl

Shoe Joint Volume: (40 ft fill)

40 ft * 0.868 ft ³ /ft	= 34.72 ft ³
	= 6.2 bbl

Tail plus shoe joint

	= 368.32 ft ³
	= 65.6 bbl

Total Tail

	= 270.03 sack
--	---------------

Total Pipe Capacity:

850 ft * 0.868 ft ³ /ft	= 737.77 ft ³
	= 131.4 bbl

Displacement Volume to Shoe Joint:

Capacity of Pipe - Shoe Joint	= 131.4 bbl - 6.2 bbl
	= 125.2 bbl

2.3 Job Volume Estimates Surface Casing

Stage 1

Fluid 1: Spacer Sweep

Gel Spacer w/Red Dye

2.50 lbm/bbl CHEM,FDP-S1050-12, BULK BAG

0.10 lbm/bbl Rhodamine Red Dye No. 2

Fluid Density:

8.5 lbm/gal

Volume:

20 bbl

Fluid 2: Lead Slurry

EXTENDACEM (TM) SYSTEM

Fluid Weight:

13.5 lbm/gal

Slurry Yield:

1.728 ft³/sack

Total Mixing Fluid:

9.21 Gal/sack

Calculated Volume:

108.9 bbl

Proposed Volume:

108.9 bbl

Top Of Fluid:

0 ft

Calculated Fill:

550 ft

Calculated sack:

353.75 sack

Proposed sack:

355 sack

Fluid 3: Tail Slurry

HALCEM (TM) SYSTEM

2 % Calcium Chloride, Pellet

Fluid Weight:

14.8 lbm/gal

Slurry Yield:

1.364 ft³/sack

Total Mixing Fluid:

6.61 Gal/sack

Calculated Volume:

65.6 bbl

Proposed Volume:

65.6 bbl

Top Of Fluid:

550 ft

Calculated Fill:

300 ft

Calculated sack:

269.90 sack

Proposed sack:

270 sack

2.4 Volume Estimate Table Surface Casing

Calculations are used for volume estimation. Well conditions will dictate final cement job design.
Stage 1

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate	Downhole Volume
1	SPACER	Gel Spacer w/Red Dye	8.5		20 bbl
2	CEMENT	ExtendaCem™ CZ	13.5		355 sack
3	CEMENT	HalCem™ C	14.8		270 sack

NOTE: These slurries and spacers will require lab testing. The additives and concentrations are estimates based on field experience in the area and may need to be modified prior to the job. The proposed spacer is designed to be generally compatible with water base mud systems. Compatibility testing with field mud samples used may indicate changes in the additive package and the related costs.

3 1st Intermediate

3.1 Job Information 1st Intermediate

Job Criticality Status: GREEN

Well Name: PARADE BWY STATE

Well #: 1H

Surface Casing

0 - 850 ft (MD)

Outer Diameter

13.375 in

Inner Diameter

12.615 in

Linear Weight

54.5 lbm/ft

Casing Grade

J-55

12-1/4" Hole

850 - 4950 ft (MD)

Inner Diameter

12.25 in

Excess Factor

100 %

1st Intermediate Casing

0 - 4950 ft (MD)

Outer Diameter

9.625 in

Inner Diameter

8.921 in

Shoe Joint Length

40 ft

3.2 Estimated Calculations 1st Intermediate

Stage 1

CEMENT: (4450 ft fill)

$$3600 \text{ ft} * 0.3132 \text{ ft}^3/\text{ft} * 100 \% = 2254.95 \text{ ft}^3$$

$$850 \text{ ft} * 0.3627 \text{ ft}^3/\text{ft} * 0 \% = 308.28 \text{ ft}^3$$

$$\text{EconoCem}^{\text{TM}} \text{ HLC} = 2563.23 \text{ ft}^3$$

$$= 456.5 \text{ bbl}$$

$$\text{Total Lead} = 1369.15 \text{ sack}$$

CEMENT: (500 ft fill)

$$500 \text{ ft} * 0.3132 \text{ ft}^3/\text{ft} * 100 \% = 313.19 \text{ ft}^3$$

$$\text{HalCem}^{\text{TM}} \text{ C} = 313.19 \text{ ft}^3$$

$$= 55.8 \text{ bbl}$$

Shoe Joint Volume: (40 ft fill)

$$40 \text{ ft} * 0.4341 \text{ ft}^3/\text{ft} = 17.36 \text{ ft}^3$$

$$= 3.1 \text{ bbl}$$

Tail plus shoe joint

$$= 330.7 \text{ ft}^3$$

$$= 58.9 \text{ bbl}$$

Total Tail

$$= 248.27 \text{ sack}$$

Total Pipe Capacity:

$$850 \text{ ft} * 0.4341 \text{ ft}^3/\text{ft} = 368.95 \text{ ft}^3$$

$$4100 \text{ ft} * 0.4341 \text{ ft}^3/\text{ft} = 1779.67 \text{ ft}^3$$

$$= 382.7 \text{ bbl}$$

Displacement Volume to Shoe Joint:

$$\text{Capacity of Pipe} - \text{Shoe Joint} = 382.7 \text{ bbl} - 3.1 \text{ bbl}$$

$$= 379.6 \text{ bbl}$$

3.3 Job Volume Estimates 1st Intermediate

Stage 1

Fluid 1: Spacer Sweep

Gel Spacer w/Red Dye

2.50 lbm/bbl CHEM,FDP-S1050-12, BULK BAG

0.10 lbm/bbl Rhodamine Red Dye No. 2

Fluid Density: 8.5 lbm/gal
Volume: 20 bbl

Fluid 2: Lead Slurry

ECONOCHEM (TM) SYSTEM

5 % Salt

Fluid Weight: 12.9 lbm/gal
Slurry Yield: 1.872 ft³/sack
Total Mixing Fluid: 10.11 Gal/sack
Calculated Volume: 456.5 bbl
Proposed Volume: 456.5 bbl
Top Of Fluid: 0 ft
Calculated Fill: 4450 ft
Calculated sack: 1369.25 sack
Proposed sack: 1370 sack

Fluid 3: Tail Slurry

HALCEM (TM) SYSTEM

Fluid Weight: 14.8 lbm/gal
Slurry Yield: 1.332 ft³/sack
Total Mixing Fluid: 6.42 Gal/sack
Calculated Volume: 58.9 bbl
Proposed Volume: 58.9 bbl
Top Of Fluid: 4450 ft
Calculated Fill: 500 ft
Calculated sack: 248.16 sack
Proposed sack: 250 sack

3.4 Volume Estimate Table 1st Intermediate

Calculations are used for volume estimation. Well conditions will dictate final cement job design.
Stage 1

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate	Downhole Volume
1	SPACER	Gel Spacer w/Red Dye	8.5		20 bbl
2	CEMENT	EconoCem™ HLC	12.9		1370 sack
3	CEMENT	HalCem™ C	14.8		250 sack

NOTE: These slurries and spacers will require lab testing. The additives and concentrations are estimates based on field experience in the area and may need to be modified prior to the job. The proposed spacer is designed to be generally compatible with water base mud systems. Compatibility testing with field mud samples used may indicate changes in the additive package and the related costs.

4 2nd Intermediate

4.1 Job Information 2nd Intermediate

Job Criticality Status: GREEN

Well Name: PARADE BWY STATE

Well #: 1H

1st Intermediate Casing 0 - 4950 ft (MD)

Outer Diameter 9.625 in

Inner Diameter 8.921 in

8-3/4" Hole 4950 - 10553 ft (MD)

Inner Diameter 8.75 in

Excess Factor 50 %

8-3/4" Hole 10553 - 11553 ft (MD)

Inner Diameter 8.75 in

2nd Intermediate Casing 0 - 11553 ft (MD)

Outer Diameter 7 in

Inner Diameter 6.276 in

Shoe Joint Length 40 ft

4.2 Estimated Calculations 2nd Intermediate

Stage 1

CEMENT: (10553 ft fill)

5603 ft * 0.1503 ft³/ft * 50 % = 1263.45 ft³

4950 ft * 0.1668 ft³/ft * 0 % = 825.72 ft³

NeoCem™ Light = 2089.17 ft³

= 372.1 bbl

Total Lead = 596.74 sack

CEMENT: (1000 ft fill)

1000 ft * 0.1503 ft³/ft * 0 % = 150.33 ft³

NeoCem™ IT = 150.33 ft³

= 26.8 bbl

Shoe Joint Volume: (40 ft fill)

40 ft * 0.2148 ft³/ft = 8.59 ft³

= 1.5 bbl

Tail plus shoe joint

= 158.89 ft³

= 28.3 bbl

Total Tail

= 151.47 sack

Total Pipe Capacity:

4950 ft * 0.2148 ft³/ft = 1063.4 ft³

5603 ft * 0.2148 ft³/ft = 1203.69 ft³

1000 ft * 0.2148 ft³/ft = 214.83 ft³

= 442 bbl

Displacement Volume to Shoe Joint:

Capacity of Pipe - Shoe Joint = 442 bbl - 1.5 bbl

= 440.5 bbl

4.3 Job Volume Estimates 2nd Intermediate

Stage 1

Fluid 1: Spacer Sweep

Gel Spacer w/Red Dye

2.50 lbm/bbl CHEM,FDP-S1050-12, BULK BAG

0.10 lbm/bbl Rhodamine Red Dye No. 2

Fluid Density: 8.5 lbm/gal
Volume: 20 bbl

Fluid 2: Lead Slurry

NeoCem TM

Fluid Weight: 9 lbm/gal
Slurry Yield: 3.501 ft³/sack
Total Mixing Fluid: 14.21 Gal/sack
Calculated Volume: 372.1 bbl
Proposed Volume: 372.1 bbl
Top Of Fluid: 0 ft
Calculated Fill: 10553 ft
Calculated sack: 596.73 sack
Proposed sack: 600 sack

Fluid 3: Tail Slurry

NeoCem TM

Fluid Weight: 15 lbm/gal
Slurry Yield: 1.049 ft³/sack
Total Mixing Fluid: 4.31 Gal/sack
Calculated Volume: 28.3 bbl
Proposed Volume: 28.3 bbl
Top Of Fluid: 10553 ft
Calculated Fill: 1000 ft
Calculated sack: 151.50 sack
Proposed sack: 155 sack

4.4 Volume Estimate Table 2nd Intermediate

Calculations are used for volume estimation. Well conditions will dictate final cement job design.
Stage 1

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate	Downhole Volume
1	SPACER	Gel Spacer w/Red Dye	8.5		20 bbl
2	CEMENT	NeoCem™ Light	9		374.1 bbl
3	CEMENT	NeoCem™ IT	15		29 bbl

NOTE: These slurries and spacers will require lab testing. The additives and concentrations are estimates based on field experience in the area and may need to be modified prior to the job. The proposed spacer is designed to be generally compatible with water base mud systems. Compatibility testing with field mud samples used may indicate changes in the additive package and the related costs.

5 Lateral Production Liner

5.1 Job Information Lateral Production Liner

Job Criticality Status: GREEN

Well Name: PARADE BWY STATE

Well #: 1H

2nd Intermediate Casing

0 - 11553 ft (MD)

Outer Diameter

7 in

Inner Diameter

6.276 in

Kick-off Point

- 11553 ft (MD)

6-1/8" Hole

11553 - 19185 ft (MD)

11553- 12020 ft (TVD)

Inner Diameter

6.125 in

Excess Factor

20 %

Production Liner

11053 - 19185 ft (MD)

11053- 12020 ft (TVD)

Outer Diameter

4.5 in

Inner Diameter

3.92 in

Drill Pipe

0 - 11053 ft (MD)

Outer Diameter

4.5 in

Inner Diameter

3.826 in

5.2 *Estimated Calculations* *Lateral Production Liner*

Stage 1

SPACER: (889 ft fill)

$889 \text{ ft} * 0.2148 \text{ ft}^3/\text{ft} * 0 \%$	= 190.9 ft ³
Total Spacer	= 190.9 ft ³
	= 34 bbl

CEMENT: (8132 ft fill)

$7632 \text{ ft} * 0.0942 \text{ ft}^3/\text{ft} * 20 \%$	= 862.44 ft ³
$500 \text{ ft} * 0.1044 \text{ ft}^3/\text{ft} * 0 \%$	= 52.19 ft ³
SoluCem™	= 914.63 ft ³
	= 162.9 bbl

Total Tail	= 349.22 sack
------------	---------------

Total Pipe Capacity:

$7632 \text{ ft} * 0.0838 \text{ ft}^3/\text{ft}$	= 639.64 ft ³
$11053 \text{ ft} * 0.0798 \text{ ft}^3/\text{ft}$	= 882.47 ft ³
$500 \text{ ft} * 0.0838 \text{ ft}^3/\text{ft}$	= 41.91 ft ³
	= 278.6 bbl

5.3 Job Volume Estimates

Lateral Production Liner

Stage 1

Fluid 1: Spacer Sweep

14 lbm/gal CleanSpacer III

4 lbm/bbl SEM-93P, 35 LB SACK

4 lbm/bbl SEM-94P, 35 LB SACK

0.20 gal/bbl D-AIR 3000L

307 lbm/bbl Barite

Fluid Density:

14 lbm/gal

Volume:

34 bbl

Fluid 2: Gas Migration Control

SOLUCEM (TM) CEMENT

0.25 lbm/sk D-AIR 5000

0.85 % HR-601

Fluid Weight:

15 lbm/gal

Slurry Yield:

2.619 ft³/sack

Total Mixing Fluid:

11.3 Gal/sack

Calculated Volume:

162.9 bbl

Proposed Volume:

162.9 bbl

Top Of Fluid:

11053 ft

Calculated Fill:

8132 ft

Calculated sack:

349.23 sack

Proposed sack:

350 sack

Fluid 3: Water Based Spacer

Liner Volume

Fluid Density:

8.4 lbm/gal

Volume:

119.1 bbl

Fluid 4: Spacer Sweep

14 lbm/gal CleanSpacer III

4 lbm/bbl SEM-93P, 35 LB SACK

4 lbm/bbl SEM-94P, 35 LB SACK

0.20 gal/bbl D-AIR 3000L

307 lbm/bbl Barite

Fluid Density:

14 lbm/gal

Volume:

16 bbl

5.4 Volume Estimate Table Lateral Production Liner

Calculations are used for volume estimation. Well conditions will dictate final cement job design.
Stage 1

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate	Downhole Volume
1	SPACER	14 lbm/gal CleanSpacer III	14		34 bbl
2	CEMENT	SoluCem™	15		350 sack
3	SPACER	Liner Volume	8.4		119.1 bbl
4	SPACER	14 lbm/gal CleanSpacer III	14		16 bbl

NOTE: These slurries and spacers will require lab testing. The additives and concentrations are estimates based on field experience in the area and may need to be modified prior to the job. The proposed spacer is designed to be generally compatible with water base mud systems. Compatibility testing with field mud samples used may indicate changes in the additive package and the related costs.