



H₂S Drilling Operation Plan

1. **All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:**
 - a. Characteristics of H₂S
 - b. Physical effects and hazards
 - c. Principal and operation of H₂S detectors, warning system and briefing areas
 - d. Evacuation procedure, routes and first aid
 - e. Proper use of safety equipment and life support systems
 - f. Essential personnel meeting Medical Evaluation criteria will receive additional training on the proper use of 30 minute pressure demand air packs.
2. **Briefing Area:**
 - a. Two perpendicular areas will be designated by signs and readily accessible.
 - b. Upon location entry there will be a designated area to establish all safety compliance criteria (1.) has been met.
3. **H₂S Detection and Alarm Systems:**
 - a. H₂S sensors/detectors shall be located on the drilling rig floor, in the base of the sub structure/cellar area, and on the mud pits in the shale shaker area. Additional H₂S detectors may be placed as deemed necessary. All detectors will be set to initiate visual alarm at 10 ppm and visual with audible at 14 ppm and all equipment will be calibrated every 30 days or as needed.
 - b. An audio alarm will be installed on the derrick floor and in the top doghouse.
4. **Protective Equipment for Essential Personnel:**
 - a. **Breathing Apparatus:**
 - i. Rescue Packs (SCBA) - 1 Unit shall be placed at each briefing area.
 - ii. Two (SCBA) Units will be stored in safety trailer on location.
 - iii. Work/Escapes packs - 1 Unit will be available on rig floor in doghouse for emergency evacuation for driller.
 - b. **Auxiliary Rescue Equipment:**
 - i. Stretcher
 - ii. 2 - OSHA full body harnesses
 - iii. 100 ft. 5/8" OSHA approved rope
 - iv. 1 - 20# class ABC fire extinguisher
5. **Windsock and/or Wind Streamers:**
 - a. Windsock at mud pit area should be high enough to be visible.
 - b. Windsock on the rig floor should be high enough to be visible.
6. **Communication:**
 - a. While working under mask scripting boards will be used for communication where applicable.
 - b. Hand signals will be used when script boards are not applicable.



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- c. Two way radios will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at Drilling Foreman's Office.

7. **Drill Stem Testing:** - No Planned DST at this time.

8. **Mud program:**

- a. If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers if necessary.

9. **Metallurgy:**

- a. All drill strings, casing, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
- b. Drilling Contractor supervisor will be required to be familiar with the effect H₂S has on tubular goods and other mechanical equipment provided through contractor.



H₂S Contingency Plan

Emergency Procedures

In the event of a release of H₂S, the first responder(s) must:

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H₂S monitors and air packs in order to control the release.
- Use the “buddy system” to ensure no injuries occur during the response.
- Take precautions to avoid personal injury during this operation.
- Contact Operator and/or local officials the aid in operation. See list of phone numbers attached.
- Have received training in the:
 - Detection of H₂S and
 - Measures for protection against the gas,
 - Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas.

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air=1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air=1	2 ppm	N/A	1000 ppm

Contacting Authorities

Ameredev Operating LLC personnel must liaise with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including direction to site. The following call list of essential and potential responders has been prepared for use during a release. Ameredev Operating LLC’s response must be in coordination with the State of New Mexico’s “Hazardous Materials Emergency Response Plan” (HMER)



H₂S Contingency Plan

Ameredev Operating LLC – Emergency Phone 737-300-4799			
Key Personnel:			
Name	Title	Office	Mobile
Floyd Hammond	Chief Operating officer	737-300-4724	512-783-6810
Zachary Boyd	Operations Superintendent	737-300-4725	432-385-6996
Blake Estrada	Construction Foreman		432-385-5831

<u>Artesia</u>			
Ambulance			911
State Police			575-746-2703
City Police			575-746-2703
Sheriff's Office			575-746-9888
Fire Department			575-746-2701
Local Emergency Planning Committee			575-746-2122
New Mexico Oil Conservation Division			575-748-1283
<u>Carlsbad</u>			
Ambulance			911
State Police			575-885-3137
City Police			575-885-2111
Sheriff's Office			575-887-7551
Fire Department			575-887-3798
Local Emergency Planning Committee			575-887-6544
US Bureau of Land Management			575-887-6544
<u>Santa Fe</u>			
New Mexico Emergency Response Commission (Santa Fe)			505-476-9600
New Mexico Emergency Response Commission (Santa Fe) 24 Hrs			505-827-9126
New Mexico State Emergency Operations Center			505-476-9635
<u>National</u>			
National Emergency Response Center (Washington, D.C.)			800-424-8802
<u>Medical</u>			
Flight for Life - 4000 24th St.; Lubbock, TX			806-743-9911
Aerocare - R3, Box 49F; Lubbock, TX			806-747-8923
Med Flight Air Amb - 2301 Yale Blvd S.E., #D3; Albuquerque, NM			505-842-4433
'SB Air Med Service - 2505 Clark Carr Loop S.E.; Albuquerque, NM			505-842-4949



Ameredev Operating, LLC

**Lea County, NM (NAD83 NME)
(Nandina Fed) Sec-31_T-25-S_R-36-E
Nandina Fed Com 25-36-31#125H**

OWB

Plan: Plan #2

Standard Planning Report

26 June, 2018





Database:	EDM5000	Local Co-ordinate Reference:	Well Nandina Fed Com 25-36-31 #125H
Company:	Ameredev Operating, LLC	TVD Reference:	KB @ 3041.0usft (H&P 616)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	KB @ 3041.0usft (H&P 616)
Site:	(Nandina Fed) Sec-31_T-25-S_R-36-E	North Reference:	Grid
Well:	Nandina Fed Com 25-36-31 #125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #2		

Project	Lea County, NM (NAD83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	(Nandina Fed) Sec-31_T-25-S_R-36-E				
Site Position:		Northing:	394,412.00 usft	Latitude:	32.0801272
From:	Map	Easting:	860,517.00 usft	Longitude:	-103.3028096
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.55 °

Well	Nandina Fed Com 25-36-31 #125H					
Well Position	+N/-S	-1.0 usft	Northing:	394,411.00 usft	Latitude:	32.0801260
	+E/-W	-60.0 usft	Easting:	860,457.00 usft	Longitude:	-103.3030033
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,014.0 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2018/04/25	6.72	59.96	47,795.68308683

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.17

Plan Survey Tool Program	Date	2018/06/25		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	22,396.8 Plan #2 (OWB)	MWD	
			MWD - Standard	



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Wellbore:	OWB		
Design:	Plan #2		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,150.1	3.00	92.73	2,150.0	-0.2	3.9	2.00	2.00	0.00	92.73	
6,015.4	3.00	92.73	6,010.0	-9.8	206.1	0.00	0.00	0.00	0.00	
6,165.4	0.00	0.00	6,160.0	-10.0	210.0	2.00	-2.00	0.00	180.00	
11,821.2	0.00	0.00	11,815.8	-10.0	210.0	0.00	0.00	0.00	0.00	
12,421.2	60.00	327.00	12,312.0	230.3	54.0	10.00	10.00	0.00	327.00	
12,851.6	90.00	359.44	12,425.0	620.3	-54.8	10.00	6.97	7.54	51.81	
22,266.8	90.00	359.44	12,425.0	10,035.0	-147.0	0.00	0.00	0.00	0.00	LTP (Nandina Fed (
22,396.8	90.00	359.44	12,425.0	10,165.0	-148.3	0.00	0.00	0.00	0.00	PBHL (Nandina Fec

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Well:	Nandina Fed Com 25-36-31 #125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,068.0	0.00	0.00	1,068.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,508.0	0.00	0.00	1,508.0	0.0	0.0	0.0	0.00	0.00	0.00
Salado									
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
BUILD - 2.00									
2,100.0	2.00	92.73	2,100.0	-0.1	1.7	-0.1	2.00	2.00	0.00
2,150.1	3.00	92.73	2,150.0	-0.2	3.9	-0.2	2.00	2.00	0.00
HOLD - 3865.3 at 2150.1 MD									
2,200.0	3.00	92.73	2,199.9	-0.3	6.5	-0.4	0.00	0.00	0.00
2,300.0	3.00	92.73	2,299.7	-0.6	11.8	-0.7	0.00	0.00	0.00
2,400.0	3.00	92.73	2,399.6	-0.8	17.0	-1.1	0.00	0.00	0.00
2,500.0	3.00	92.73	2,499.5	-1.1	22.2	-1.4	0.00	0.00	0.00
2,600.0	3.00	92.73	2,599.3	-1.3	27.5	-1.7	0.00	0.00	0.00
2,700.0	3.00	92.73	2,699.2	-1.6	32.7	-2.0	0.00	0.00	0.00
2,800.0	3.00	92.73	2,799.0	-1.8	37.9	-2.4	0.00	0.00	0.00
2,900.0	3.00	92.73	2,898.9	-2.1	43.1	-2.7	0.00	0.00	0.00
3,000.0	3.00	92.73	2,998.8	-2.3	48.4	-3.0	0.00	0.00	0.00
3,100.0	3.00	92.73	3,098.6	-2.6	53.6	-3.3	0.00	0.00	0.00
3,200.0	3.00	92.73	3,198.5	-2.8	58.8	-3.7	0.00	0.00	0.00
3,235.6	3.00	92.73	3,234.0	-2.9	60.7	-3.8	0.00	0.00	0.00
Tansill									
3,300.0	3.00	92.73	3,298.4	-3.1	64.1	-4.0	0.00	0.00	0.00
3,400.0	3.00	92.73	3,398.2	-3.3	69.3	-4.3	0.00	0.00	0.00
3,500.0	3.00	92.73	3,498.1	-3.5	74.5	-4.6	0.00	0.00	0.00
3,600.0	3.00	92.73	3,597.9	-3.8	79.8	-5.0	0.00	0.00	0.00
3,700.0	3.00	92.73	3,697.8	-4.0	85.0	-5.3	0.00	0.00	0.00
3,800.0	3.00	92.73	3,797.7	-4.3	90.2	-5.6	0.00	0.00	0.00
3,900.0	3.00	92.73	3,897.5	-4.5	95.4	-5.9	0.00	0.00	0.00
4,000.0	3.00	92.73	3,997.4	-4.8	100.7	-6.3	0.00	0.00	0.00
4,100.0	3.00	92.73	4,097.3	-5.0	105.9	-6.6	0.00	0.00	0.00
4,200.0	3.00	92.73	4,197.1	-5.3	111.1	-6.9	0.00	0.00	0.00
4,300.0	3.00	92.73	4,297.0	-5.5	116.4	-7.2	0.00	0.00	0.00
4,400.0	3.00	92.73	4,396.8	-5.8	121.6	-7.6	0.00	0.00	0.00

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Wellbore:	OWB		
Design:	Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,500.0	3.00	92.73	4,496.7	-6.0	126.8	-7.9	0.00	0.00	0.00
4,600.0	3.00	92.73	4,596.6	-6.3	132.1	-8.2	0.00	0.00	0.00
4,700.0	3.00	92.73	4,696.4	-6.5	137.3	-8.5	0.00	0.00	0.00
4,800.0	3.00	92.73	4,796.3	-6.8	142.5	-8.9	0.00	0.00	0.00
4,900.0	3.00	92.73	4,896.2	-7.0	147.7	-9.2	0.00	0.00	0.00
5,000.0	3.00	92.73	4,996.0	-7.3	153.0	-9.5	0.00	0.00	0.00
5,038.0	3.00	92.73	5,034.0	-7.4	155.0	-9.6	0.00	0.00	0.00
Lamar									
5,073.1	3.00	92.73	5,069.0	-7.5	156.8	-9.7	0.00	0.00	0.00
Bell Canyon									
5,088.1	3.00	92.73	5,084.0	-7.5	157.6	-9.8	0.00	0.00	0.00
9.625									
5,100.0	3.00	92.73	5,095.9	-7.5	158.2	-9.8	0.00	0.00	0.00
5,200.0	3.00	92.73	5,195.7	-7.8	163.4	-10.2	0.00	0.00	0.00
5,300.0	3.00	92.73	5,295.6	-8.0	168.7	-10.5	0.00	0.00	0.00
5,400.0	3.00	92.73	5,395.5	-8.3	173.9	-10.8	0.00	0.00	0.00
5,500.0	3.00	92.73	5,495.3	-8.5	179.1	-11.1	0.00	0.00	0.00
5,600.0	3.00	92.73	5,595.2	-8.8	184.4	-11.5	0.00	0.00	0.00
5,700.0	3.00	92.73	5,695.1	-9.0	189.6	-11.8	0.00	0.00	0.00
5,800.0	3.00	92.73	5,794.9	-9.3	194.8	-12.1	0.00	0.00	0.00
5,900.0	3.00	92.73	5,894.8	-9.5	200.0	-12.4	0.00	0.00	0.00
6,000.0	3.00	92.73	5,994.7	-9.8	205.3	-12.8	0.00	0.00	0.00
6,015.4	3.00	92.73	6,010.0	-9.8	206.1	-12.8	0.00	0.00	0.00
DROP - 2.00									
6,100.0	1.31	92.73	6,094.6	-10.0	209.3	-13.0	2.00	-2.00	0.00
6,165.4	0.00	0.00	6,160.0	-10.0	210.0	-13.1	2.00	-2.00	0.00
HOLD - 5655.8 at 6165.4 MD									
6,200.0	0.00	0.00	6,194.6	-10.0	210.0	-13.1	0.00	0.00	0.00
6,300.0	0.00	0.00	6,294.6	-10.0	210.0	-13.1	0.00	0.00	0.00
6,400.0	0.00	0.00	6,394.6	-10.0	210.0	-13.1	0.00	0.00	0.00
6,500.0	0.00	0.00	6,494.6	-10.0	210.0	-13.1	0.00	0.00	0.00
6,600.0	0.00	0.00	6,594.6	-10.0	210.0	-13.1	0.00	0.00	0.00
6,700.0	0.00	0.00	6,694.6	-10.0	210.0	-13.1	0.00	0.00	0.00
6,800.0	0.00	0.00	6,794.6	-10.0	210.0	-13.1	0.00	0.00	0.00
6,900.0	0.00	0.00	6,894.6	-10.0	210.0	-13.1	0.00	0.00	0.00
7,000.0	0.00	0.00	6,994.6	-10.0	210.0	-13.1	0.00	0.00	0.00
7,100.0	0.00	0.00	7,094.6	-10.0	210.0	-13.1	0.00	0.00	0.00
7,114.4	0.00	0.00	7,109.0	-10.0	210.0	-13.1	0.00	0.00	0.00
Brushy Canyon									
7,200.0	0.00	0.00	7,194.6	-10.0	210.0	-13.1	0.00	0.00	0.00
7,300.0	0.00	0.00	7,294.6	-10.0	210.0	-13.1	0.00	0.00	0.00
7,400.0	0.00	0.00	7,394.6	-10.0	210.0	-13.1	0.00	0.00	0.00
7,500.0	0.00	0.00	7,494.6	-10.0	210.0	-13.1	0.00	0.00	0.00
7,600.0	0.00	0.00	7,594.6	-10.0	210.0	-13.1	0.00	0.00	0.00
7,700.0	0.00	0.00	7,694.6	-10.0	210.0	-13.1	0.00	0.00	0.00
7,800.0	0.00	0.00	7,794.6	-10.0	210.0	-13.1	0.00	0.00	0.00
7,900.0	0.00	0.00	7,894.6	-10.0	210.0	-13.1	0.00	0.00	0.00
8,000.0	0.00	0.00	7,994.6	-10.0	210.0	-13.1	0.00	0.00	0.00
8,100.0	0.00	0.00	8,094.6	-10.0	210.0	-13.1	0.00	0.00	0.00
8,200.0	0.00	0.00	8,194.6	-10.0	210.0	-13.1	0.00	0.00	0.00
8,300.0	0.00	0.00	8,294.6	-10.0	210.0	-13.1	0.00	0.00	0.00
8,340.4	0.00	0.00	8,335.0	-10.0	210.0	-13.1	0.00	0.00	0.00
Bone Spring Lime									

Database:	EDM5000	Local Co-ordinate Reference:	Well Nandina Fed Com 25-36-31 #125H
Company:	Ameredev Operating, LLC	TVD Reference:	KB @ 3041.0usft (H&P 616)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	KB @ 3041.0usft (H&P 616)
Site:	(Nandina Fed) Sec-31_T-25-S_R-36-E	North Reference:	Grid
Well:	Nandina Fed Com 25-36-31 #125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,400.0	0.00	0.00	8,394.6	-10.0	210.0	-13.1	0.00	0.00	0.00
8,500.0	0.00	0.00	8,494.6	-10.0	210.0	-13.1	0.00	0.00	0.00
8,600.0	0.00	0.00	8,594.6	-10.0	210.0	-13.1	0.00	0.00	0.00
8,700.0	0.00	0.00	8,694.6	-10.0	210.0	-13.1	0.00	0.00	0.00
8,800.0	0.00	0.00	8,794.6	-10.0	210.0	-13.1	0.00	0.00	0.00
8,900.0	0.00	0.00	8,894.6	-10.0	210.0	-13.1	0.00	0.00	0.00
9,000.0	0.00	0.00	8,994.6	-10.0	210.0	-13.1	0.00	0.00	0.00
9,100.0	0.00	0.00	9,094.6	-10.0	210.0	-13.1	0.00	0.00	0.00
9,200.0	0.00	0.00	9,194.6	-10.0	210.0	-13.1	0.00	0.00	0.00
9,300.0	0.00	0.00	9,294.6	-10.0	210.0	-13.1	0.00	0.00	0.00
9,400.0	0.00	0.00	9,394.6	-10.0	210.0	-13.1	0.00	0.00	0.00
9,500.0	0.00	0.00	9,494.6	-10.0	210.0	-13.1	0.00	0.00	0.00
9,600.0	0.00	0.00	9,594.6	-10.0	210.0	-13.1	0.00	0.00	0.00
9,700.0	0.00	0.00	9,694.6	-10.0	210.0	-13.1	0.00	0.00	0.00
9,716.4	0.00	0.00	9,711.0	-10.0	210.0	-13.1	0.00	0.00	0.00
First Bone Spring									
9,800.0	0.00	0.00	9,794.6	-10.0	210.0	-13.1	0.00	0.00	0.00
9,900.0	0.00	0.00	9,894.6	-10.0	210.0	-13.1	0.00	0.00	0.00
10,000.0	0.00	0.00	9,994.6	-10.0	210.0	-13.1	0.00	0.00	0.00
10,100.0	0.00	0.00	10,094.6	-10.0	210.0	-13.1	0.00	0.00	0.00
10,200.0	0.00	0.00	10,194.6	-10.0	210.0	-13.1	0.00	0.00	0.00
10,274.4	0.00	0.00	10,269.0	-10.0	210.0	-13.1	0.00	0.00	0.00
Second Bone Spring									
10,300.0	0.00	0.00	10,294.6	-10.0	210.0	-13.1	0.00	0.00	0.00
10,400.0	0.00	0.00	10,394.6	-10.0	210.0	-13.1	0.00	0.00	0.00
10,500.0	0.00	0.00	10,494.6	-10.0	210.0	-13.1	0.00	0.00	0.00
10,600.0	0.00	0.00	10,594.6	-10.0	210.0	-13.1	0.00	0.00	0.00
10,700.0	0.00	0.00	10,694.6	-10.0	210.0	-13.1	0.00	0.00	0.00
10,800.0	0.00	0.00	10,794.6	-10.0	210.0	-13.1	0.00	0.00	0.00
10,860.4	0.00	0.00	10,855.0	-10.0	210.0	-13.1	0.00	0.00	0.00
Third Bone Spring Upper									
10,900.0	0.00	0.00	10,894.6	-10.0	210.0	-13.1	0.00	0.00	0.00
11,000.0	0.00	0.00	10,994.6	-10.0	210.0	-13.1	0.00	0.00	0.00
11,100.0	0.00	0.00	11,094.6	-10.0	210.0	-13.1	0.00	0.00	0.00
11,200.0	0.00	0.00	11,194.6	-10.0	210.0	-13.1	0.00	0.00	0.00
11,300.0	0.00	0.00	11,294.6	-10.0	210.0	-13.1	0.00	0.00	0.00
11,400.0	0.00	0.00	11,394.6	-10.0	210.0	-13.1	0.00	0.00	0.00
11,459.4	0.00	0.00	11,454.0	-10.0	210.0	-13.1	0.00	0.00	0.00
Third Bone Spring									
11,500.0	0.00	0.00	11,494.6	-10.0	210.0	-13.1	0.00	0.00	0.00
11,600.0	0.00	0.00	11,594.6	-10.0	210.0	-13.1	0.00	0.00	0.00
11,700.0	0.00	0.00	11,694.6	-10.0	210.0	-13.1	0.00	0.00	0.00
11,724.4	0.00	0.00	11,719.0	-10.0	210.0	-13.1	0.00	0.00	0.00
Wolfcamp									
11,800.0	0.00	0.00	11,794.6	-10.0	210.0	-13.1	0.00	0.00	0.00
11,821.2	0.00	0.00	11,815.8	-10.0	210.0	-13.1	0.00	0.00	0.00
KOP - BUILD 10.00 - 10377' FNL, 2060' FEL - FTP (Nandina Fed Com 25-36-31 #105H)									
11,850.0	2.88	327.00	11,844.5	-9.4	209.6	-12.4	9.99	9.99	0.00
11,857.5	3.62	327.00	11,852.0	-9.0	209.4	-12.1	10.00	10.00	0.00
7.625									
11,900.0	7.88	327.00	11,894.3	-5.5	207.1	-8.5	10.00	10.00	0.00
11,950.0	12.88	327.00	11,943.5	2.1	202.2	-0.9	10.00	10.00	0.00
12,000.0	17.88	327.00	11,991.7	13.2	194.9	10.4	10.00	10.00	0.00

Database: EDM5000
Company: Ameredev Operating, LLC
Project: Lea County, NM (NAD83 NME)
Site: (Nandina Fed) Sec-31_T-25-S_R-36-E
Well: Nandina Fed Com 25-36-31 #125H
Wellbore: OWB
Design: Plan #2

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well Nandina Fed Com 25-36-31 #125H
 KB @ 3041.0usft (H&P 616)
 KB @ 3041.0usft (H&P 616)
 Grid
 Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,050.0	22.88	327.00	12,038.5	27.8	185.5	25.1	10.00	10.00	0.00
12,100.0	27.88	327.00	12,083.7	45.8	173.8	43.2	10.00	10.00	0.00
12,102.6	28.14	327.00	12,086.0	46.8	173.1	44.3	10.00	10.00	0.00
Wolfcamp B									
12,150.0	32.88	327.00	12,126.8	67.0	160.0	64.6	10.00	10.00	0.00
12,200.0	37.88	327.00	12,167.6	91.2	144.3	89.1	10.00	10.00	0.00
12,250.0	42.88	327.00	12,205.6	118.4	126.6	116.5	10.00	10.00	0.00
12,300.0	47.88	327.00	12,240.8	148.2	107.3	146.6	10.00	10.00	0.00
12,350.0	52.88	327.00	12,272.6	180.5	86.3	179.2	10.00	10.00	0.00
12,400.0	57.88	327.00	12,301.0	215.0	63.9	214.1	10.00	10.00	0.00
12,421.2	60.00	327.00	12,312.0	230.2	54.0	229.4	10.00	10.00	0.00
TURN & BUILD - DLS 10.00 TFO 51.81									
12,449.0	61.74	329.47	12,325.5	250.9	41.2	250.2	9.99	6.27	8.91
FTP (Nandina Fed Com 25-36-31 #125H)									
12,450.0	61.80	329.56	12,326.0	251.6	40.8	251.0	9.99	6.35	8.76
12,500.0	65.04	333.82	12,348.4	291.0	19.6	290.7	10.00	6.48	8.52
12,550.0	68.40	337.86	12,368.1	332.9	0.8	332.9	10.00	6.71	8.07
12,600.0	71.85	341.71	12,385.1	377.0	-15.4	377.2	10.00	6.90	7.70
12,650.0	75.37	345.41	12,399.2	423.0	-29.0	423.4	10.00	7.05	7.40
12,700.0	78.95	348.99	12,410.3	470.5	-39.8	471.1	10.00	7.16	7.16
12,750.0	82.57	352.48	12,418.4	519.2	-47.7	519.9	10.00	7.24	6.99
12,800.0	86.22	355.92	12,423.3	568.7	-52.7	569.4	10.00	7.29	6.87
12,851.6	90.00	359.44	12,425.0	620.2	-54.8	621.0	10.00	7.32	6.82
EOC/HOLD - 9415.2 at 12851.6 MD									
12,900.0	90.00	359.44	12,425.0	668.6	-55.3	669.4	0.00	0.00	0.00
13,000.0	90.00	359.44	12,425.0	768.6	-56.3	769.4	0.00	0.00	0.00
13,100.0	90.00	359.44	12,425.0	868.6	-57.2	869.4	0.00	0.00	0.00
13,200.0	90.00	359.44	12,425.0	968.6	-58.2	969.4	0.00	0.00	0.00
13,300.0	90.00	359.44	12,425.0	1,068.6	-59.2	1,069.4	0.00	0.00	0.00
13,352.1	90.00	359.44	12,425.0	1,120.7	-59.7	1,121.5	0.00	0.00	0.00
Sec 31 1320' FSL - 9246' FNL, 2318' FEL									
13,400.0	90.00	359.44	12,425.0	1,168.6	-60.2	1,169.4	0.00	0.00	0.00
13,500.0	90.00	359.44	12,425.0	1,268.6	-61.1	1,269.4	0.00	0.00	0.00
13,600.0	90.00	359.44	12,425.0	1,368.6	-62.1	1,369.4	0.00	0.00	0.00
13,700.0	90.00	359.44	12,425.0	1,468.6	-63.1	1,469.4	0.00	0.00	0.00
13,800.0	90.00	359.44	12,425.0	1,568.6	-64.1	1,569.3	0.00	0.00	0.00
13,900.0	90.00	359.44	12,425.0	1,668.6	-65.1	1,669.3	0.00	0.00	0.00
14,000.0	90.00	359.44	12,425.0	1,768.6	-66.0	1,769.3	0.00	0.00	0.00
14,100.0	90.00	359.44	12,425.0	1,868.6	-67.0	1,869.3	0.00	0.00	0.00
14,200.0	90.00	359.44	12,425.0	1,968.6	-68.0	1,969.3	0.00	0.00	0.00
14,300.0	90.00	359.44	12,425.0	2,068.6	-69.0	2,069.3	0.00	0.00	0.00
14,400.0	90.00	359.44	12,425.0	2,168.6	-70.0	2,169.3	0.00	0.00	0.00
14,500.0	90.00	359.44	12,425.0	2,268.5	-70.9	2,269.3	0.00	0.00	0.00
14,600.0	90.00	359.44	12,425.0	2,368.5	-71.9	2,369.3	0.00	0.00	0.00
14,672.1	90.00	359.44	12,425.0	2,440.6	-72.6	2,441.4	0.00	0.00	0.00
Sec 31 2640' FSL - 7926' FNL, 2318' FEL									
14,700.0	90.00	359.44	12,425.0	2,468.5	-72.9	2,469.3	0.00	0.00	0.00
14,800.0	90.00	359.44	12,425.0	2,568.5	-73.9	2,569.3	0.00	0.00	0.00
14,900.0	90.00	359.44	12,425.0	2,668.5	-74.9	2,669.3	0.00	0.00	0.00
15,000.0	90.00	359.44	12,425.0	2,768.5	-75.8	2,769.3	0.00	0.00	0.00
15,100.0	90.00	359.44	12,425.0	2,868.5	-76.8	2,869.3	0.00	0.00	0.00
15,200.0	90.00	359.44	12,425.0	2,968.5	-77.8	2,969.3	0.00	0.00	0.00
15,300.0	90.00	359.44	12,425.0	3,068.5	-78.8	3,069.3	0.00	0.00	0.00

Database:	EDM5000	Local Co-ordinate Reference:	Well Nandina Fed Com 25-36-31 #125H
Company:	Ameredev Operating, LLC	TVD Reference:	KB @ 3041.0usft (H&P 616)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	KB @ 3041.0usft (H&P 616)
Site:	(Nandina Fed) Sec-31_T-25-S_R-36-E	North Reference:	Grid
Well:	Nandina Fed Com 25-36-31 #125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,400.0	90.00	359.44	12,425.0	3,168.5	-79.8	3,169.3	0.00	0.00	0.00
15,500.0	90.00	359.44	12,425.0	3,268.5	-80.7	3,269.3	0.00	0.00	0.00
15,600.0	90.00	359.44	12,425.0	3,368.5	-81.7	3,369.3	0.00	0.00	0.00
15,700.0	90.00	359.44	12,425.0	3,468.5	-82.7	3,469.3	0.00	0.00	0.00
15,800.0	90.00	359.44	12,425.0	3,568.5	-83.7	3,569.3	0.00	0.00	0.00
15,900.0	90.00	359.44	12,425.0	3,668.5	-84.7	3,669.3	0.00	0.00	0.00
16,000.0	90.00	359.44	12,425.0	3,768.5	-85.6	3,769.3	0.00	0.00	0.00
16,100.0	90.00	359.44	12,425.0	3,868.5	-86.6	3,869.3	0.00	0.00	0.00
16,200.0	90.00	359.44	12,425.0	3,968.5	-87.6	3,969.3	0.00	0.00	0.00
16,300.0	90.00	359.44	12,425.0	4,068.5	-88.6	4,069.3	0.00	0.00	0.00
16,400.0	90.00	359.44	12,425.0	4,168.5	-89.5	4,169.3	0.00	0.00	0.00
16,500.0	90.00	359.44	12,425.0	4,268.5	-90.5	4,269.3	0.00	0.00	0.00
16,600.0	90.00	359.44	12,425.0	4,368.4	-91.5	4,369.3	0.00	0.00	0.00
16,700.0	90.00	359.44	12,425.0	4,468.4	-92.5	4,469.3	0.00	0.00	0.00
16,800.0	90.00	359.44	12,425.0	4,568.4	-93.5	4,569.3	0.00	0.00	0.00
16,900.0	90.00	359.44	12,425.0	4,668.4	-94.4	4,669.3	0.00	0.00	0.00
17,000.0	90.00	359.44	12,425.0	4,768.4	-95.4	4,769.3	0.00	0.00	0.00
17,100.0	90.00	359.44	12,425.0	4,868.4	-96.4	4,869.3	0.00	0.00	0.00
17,200.0	90.00	359.44	12,425.0	4,968.4	-97.4	4,969.3	0.00	0.00	0.00
17,300.0	90.00	359.44	12,425.0	5,068.4	-98.4	5,069.3	0.00	0.00	0.00
17,310.7	90.00	359.44	12,425.0	5,079.1	-98.5	5,080.0	0.00	0.00	0.00
Sec 31 & 30 Cross - 5287' FNL, 2318' FEL									
17,400.0	90.00	359.44	12,425.0	5,168.4	-99.3	5,169.3	0.00	0.00	0.00
17,500.0	90.00	359.44	12,425.0	5,268.4	-100.3	5,269.3	0.00	0.00	0.00
17,600.0	90.00	359.44	12,425.0	5,368.4	-101.3	5,369.3	0.00	0.00	0.00
17,700.0	90.00	359.44	12,425.0	5,468.4	-102.3	5,469.3	0.00	0.00	0.00
17,800.0	90.00	359.44	12,425.0	5,568.4	-103.3	5,569.3	0.00	0.00	0.00
17,900.0	90.00	359.44	12,425.0	5,668.4	-104.2	5,669.3	0.00	0.00	0.00
18,000.0	90.00	359.44	12,425.0	5,768.4	-105.2	5,769.3	0.00	0.00	0.00
18,100.0	90.00	359.44	12,425.0	5,868.4	-106.2	5,869.3	0.00	0.00	0.00
18,200.0	90.00	359.44	12,425.0	5,968.4	-107.2	5,969.3	0.00	0.00	0.00
18,300.0	90.00	359.44	12,425.0	6,068.4	-108.2	6,069.3	0.00	0.00	0.00
18,400.0	90.00	359.44	12,425.0	6,168.4	-109.1	6,169.3	0.00	0.00	0.00
18,500.0	90.00	359.44	12,425.0	6,268.4	-110.1	6,269.3	0.00	0.00	0.00
18,600.0	90.00	359.44	12,425.0	6,368.4	-111.1	6,369.3	0.00	0.00	0.00
18,630.7	90.00	359.44	12,425.0	6,399.1	-111.4	6,400.0	0.00	0.00	0.00
Sec 30 1320' FSL - 3967' FNL, 2318' FEL									
18,700.0	90.00	359.44	12,425.0	6,468.3	-112.1	6,469.3	0.00	0.00	0.00
18,800.0	90.00	359.44	12,425.0	6,568.3	-113.0	6,569.3	0.00	0.00	0.00
18,900.0	90.00	359.44	12,425.0	6,668.3	-114.0	6,669.3	0.00	0.00	0.00
19,000.0	90.00	359.44	12,425.0	6,768.3	-115.0	6,769.3	0.00	0.00	0.00
19,100.0	90.00	359.44	12,425.0	6,868.3	-116.0	6,869.3	0.00	0.00	0.00
19,200.0	90.00	359.44	12,425.0	6,968.3	-117.0	6,969.3	0.00	0.00	0.00
19,300.0	90.00	359.44	12,425.0	7,068.3	-117.9	7,069.3	0.00	0.00	0.00
19,400.0	90.00	359.44	12,425.0	7,168.3	-118.9	7,169.3	0.00	0.00	0.00
19,500.0	90.00	359.44	12,425.0	7,268.3	-119.9	7,269.3	0.00	0.00	0.00
19,600.0	90.00	359.44	12,425.0	7,368.3	-120.9	7,369.3	0.00	0.00	0.00
19,700.0	90.00	359.44	12,425.0	7,468.3	-121.9	7,469.3	0.00	0.00	0.00
19,800.0	90.00	359.44	12,425.0	7,568.3	-122.8	7,569.3	0.00	0.00	0.00
19,900.0	90.00	359.44	12,425.0	7,668.3	-123.8	7,669.3	0.00	0.00	0.00
20,000.0	90.00	359.44	12,425.0	7,768.3	-124.8	7,769.3	0.00	0.00	0.00
20,100.0	90.00	359.44	12,425.0	7,868.3	-125.8	7,869.3	0.00	0.00	0.00
20,200.0	90.00	359.44	12,425.0	7,968.3	-126.8	7,969.3	0.00	0.00	0.00
20,300.0	90.00	359.44	12,425.0	8,068.3	-127.7	8,069.3	0.00	0.00	0.00

Database:	EDM5000	Local Co-ordinate Reference:	Well Nandina Fed Com 25-36-31 #125H
Company:	Ameredev Operating, LLC	TVD Reference:	KB @ 3041.0usft (H&P 616)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	KB @ 3041.0usft (H&P 616)
Site:	(Nandina Fed) Sec-31_T-25-S_R-36-E	North Reference:	Grid
Well:	Nandina Fed Com 25-36-31 #125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
20,400.0	90.00	359.44	12,425.0	8,168.3	-128.7	8,169.3	0.00	0.00	0.00
20,500.0	90.00	359.44	12,425.0	8,268.3	-129.7	8,269.3	0.00	0.00	0.00
20,600.0	90.00	359.44	12,425.0	8,368.3	-130.7	8,369.3	0.00	0.00	0.00
20,700.0	90.00	359.44	12,425.0	8,468.3	-131.7	8,469.3	0.00	0.00	0.00
20,800.0	90.00	359.44	12,425.0	8,568.2	-132.6	8,569.3	0.00	0.00	0.00
20,900.0	90.00	359.44	12,425.0	8,668.2	-133.6	8,669.3	0.00	0.00	0.00
21,000.0	90.00	359.44	12,425.0	8,768.2	-134.6	8,769.3	0.00	0.00	0.00
21,100.0	90.00	359.44	12,425.0	8,868.2	-135.6	8,869.3	0.00	0.00	0.00
21,200.0	90.00	359.44	12,425.0	8,968.2	-136.6	8,969.3	0.00	0.00	0.00
21,300.0	90.00	359.44	12,425.0	9,068.2	-137.5	9,069.3	0.00	0.00	0.00
21,400.0	90.00	359.44	12,425.0	9,168.2	-138.5	9,169.3	0.00	0.00	0.00
21,500.0	90.00	359.44	12,425.0	9,268.2	-139.5	9,269.3	0.00	0.00	0.00
21,600.0	90.00	359.44	12,425.0	9,368.2	-140.5	9,369.3	0.00	0.00	0.00
21,700.0	90.00	359.44	12,425.0	9,468.2	-141.4	9,469.3	0.00	0.00	0.00
21,800.0	90.00	359.44	12,425.0	9,568.2	-142.4	9,569.3	0.00	0.00	0.00
21,900.0	90.00	359.44	12,425.0	9,668.2	-143.4	9,669.3	0.00	0.00	0.00
22,000.0	90.00	359.44	12,425.0	9,768.2	-144.4	9,769.3	0.00	0.00	0.00
22,100.0	90.00	359.44	12,425.0	9,868.2	-145.4	9,869.3	0.00	0.00	0.00
22,200.0	90.00	359.44	12,425.0	9,968.2	-146.3	9,969.3	0.00	0.00	0.00
22,266.8	90.00	359.44	12,425.0	10,035.0	-147.0	10,036.1	0.00	0.00	0.00
LTP - LTP (Nandina Fed Com 25-36-31 #125H) - LTP (Nandina Fed Com 25-36-31 #105H)									
22,300.0	90.00	359.44	12,425.0	10,068.2	-147.3	10,069.3	0.00	0.00	0.00
22,322.7	90.00	359.44	12,425.0	10,090.9	-147.5	10,092.0	0.00	0.00	0.00
5 1/2"									
22,396.8	90.00	359.44	12,425.0	10,165.0	-148.3	10,166.1	0.00	0.00	0.00
PBHL - 200' FNL, 2318' FEL - PBHL (Nandina Fed Com 25-36-31 #125H)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP (Nandina Fed Co - hit/miss target - Shape - Point	0.00	0.00	12,425.0	130.0	-49.0	394,541.00	860,408.00	32.0804846	-103.3031575
- plan misses target center by 180.7usft at 12449.0usft MD (12325.5 TVD, 250.9 N, 41.2 E)									
PBHL (Nandina Fed C - plan misses target center by 0.3usft at 22396.8usft MD (12425.0 TVD, 10165.0 N, -148.3 E) - Point	0.00	359.44	12,425.0	10,165.0	-148.0	404,576.00	860,309.00	32.1080686	-103.3031676
LTP (Nandina Fed Co - plan hits target center - Point	0.00	359.44	12,425.0	10,035.0	-147.0	404,446.00	860,310.00	32.1077113	-103.3031684

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
5,088.1	5,084.0	9.625	9-5/8	12-1/4	
11,857.5	11,852.0	7.625	7-5/8	8-3/4	
22,322.7	12,425.0	5 1/2"	5-1/2	6-3/4	

Database:	EDM5000	Local Co-ordinate Reference:	Well Nandina Fed Com 25-36-31 #125H
Company:	Ameredev Operating, LLC	TVD Reference:	KB @ 3041.0usft (H&P 616)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	KB @ 3041.0usft (H&P 616)
Site:	(Nandina Fed) Sec-31_T-25-S_R-36-E	North Reference:	Grid
Well:	Nandina Fed Com 25-36-31 #125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan #2		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,068.0	1,068.0	Rustler			
1,508.0	1,508.0	Salado			
3,235.6	3,234.0	Tansill			
5,038.0	5,034.0	Lamar			
5,073.1	5,069.0	Bell Canyon			
7,114.4	7,109.0	Brushy Canyon			
8,340.4	8,335.0	Bone Spring Lime			
9,716.4	9,711.0	First Bone Spring			
10,274.4	10,269.0	Second Bone Spring			
10,860.4	10,855.0	Third Bone Spring Upper			
11,459.4	11,454.0	Third Bone Spring			
11,724.4	11,719.0	Wolfcamp			
12,102.6	12,086.0	Wolfcamp B			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,000.0	2,000.0	0.0	0.0	BUILD - 2.00
2,150.1	2,150.0	-0.2	3.9	HOLD - 3865.3 at 2150.1 MD
6,015.4	6,010.0	-9.8	206.1	DROP - 2.00
6,165.4	6,160.0	-10.0	210.0	HOLD - 5655.8 at 6165.4 MD
11,821.2	11,815.8	-10.0	210.0	KOP - BUILD 10.00 - 10377' FNL, 2060' FEL
12,421.2	12,312.0	230.2	54.0	TURN & BUILD - DLS 10.00 TFO 51.81
12,851.6	12,425.0	620.2	-54.8	EOC/HOLD - 9415.2 at 12851.6 MD
13,352.1	12,425.0	1,120.7	-59.7	Sec 31 1320' FSL - 9246' FNL, 2318' FEL
14,672.1	12,425.0	2,440.6	-72.6	Sec 31 2640' FSL - 7926' FNL, 2318' FEL
17,310.7	12,425.0	5,079.1	-98.5	Sec 31 & 30 Cross - 5287' FNL, 2318' FEL
18,630.7	12,425.0	6,399.1	-111.4	Sec 30 1320' FSL - 3967' FNL, 2318' FEL
22,266.8	12,425.0	10,035.0	-147.0	LTP
22,396.8	12,425.0	10,165.0	-148.3	PBHL - 200' FNL, 2318' FEL