IDAHO DEPARTMENT OF LANDS DIRECTOR'S OFFICE

300 N 6th Street Suite 103 PO Box 83720 Boise ID 83720-0050 Phone (208) 334-0200 Fax (208) 334-5342



IDAHO OIL AND GAS CONSERVATION COMMISSION

Betty Coppersmith, Chairman Marc Shigeta, Vice-Chairman Jim Classen Renee Love, Ph.D Dustin T. Miller

February 11, 2020

Snake River Oil & Gas, LLC Attn: Mr. Chris Weiser 117 East Calhoun Magnolia, AR 71753-3528

SUBJECT: Conditional Transfer of Well Permits, Well Operations

Dear Mr. Weiser,

This correspondence is notification that the Idaho Department of Lands recognizes the transfer of the well permits listed below from AM Idaho, LLC to Snake River Oil & Gas, LLC. The designation of Snake River Oil & Gas, LLC as the designated operator of the wells only applies to the wells designated below and does not apply to leases administered by Idaho Department of Lands, current applications, or Orders issued by Idaho Department of Lands or the Idaho Oil & Gas Conservation Commission to Alta Mesa Services, LP, or AM Idaho LLC.

The Department of Lands received and accepted your Power of Attorney and Acknowledgment of Surety from RLI Insurance Company in the amount of \$100,000 for the following wells:

No.	API Number	Well Name
1.	11-075-20-020	DJS Properties #1-15
2.	11-075-20-022	ML Investments #2-10
3.	11-075-20-023	DJS Properties #2-14
4.	11-075-20-024	Kauffman #1-34
5.	11-075-20-025	ML Investments #1-11
6.	11-075-20-026	ML Investments #1-3
7.	11-075-20-027	Kauffman #1-9
8.	11-075-20-029	ML Investments #2-3
9.	11-075-20-031	ML Investments #3-10
10.	11-075-20-033	Barlow #1-14
11.	11-075-20-032	Fallon #1-10

The Idaho Department of Lands does not recognize the transfer of operator for the Tracy Trust #3-2 well (USWN 11-075-20011) because it has not received a bond for the required amount of \$100,000 per IDAPA 20.07.02.220.03 and IDAPA 20.07.02.220.04.

By assuming operatorship of the wells listed above, Snake River agrees to assume full responsibility for the operation and eventual abandonment in conformity with the laws, rules, regulations and orders issued by the Commission.

If you have any questions, please don't hesitate to contact me at your earliest convenience.

Sincerely,

Mick Thomas

Division Administrator, Oil & Gas Secretary to the Oil & Gas Commission

(208) 334-0298 Office

Website: https://ogcc.idaho.gov News | Facebook | Twitter | Web Sign up to receive news from IDL

ecc: Chad Rader, Richard Brown, Nathan Caldwell, James Thum

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MICK THOMAS, DIVISION ADMINISTRATOR SECRETARY TO THE COMMISSION

IDAHO OIL AND GAS **CONSERVATION COMMISSION**

Kevin Dickey, Chairman Marc Shigeta, Vice-Chairman Renee Breedlovestrout, Ph.D Jim Classen Tom Schultz

October 19, 2017

Ronda Louderman Regulatory & Pipeline Supervisor Alta Mesa Services, LP 15021 Katy Freeway, Suite 400 Houston, TX 77094

SUBJECT: Permit to Drill #11-075-20032, Fallon #1-10, Payette Co., ID

The Idaho Department of Lands (IDL) has completed our review of this permit to drill for oil and gas. Enclosed is a copy of the approved permit. This permit was approved with the following stipulations:

- The conductor pipe shall be cemented to the surface as required by IDAPA 20.07.02.310.04. Permittee shall use ready mix cement unless water is encountered, in which case an appropriate slurry mix will be used.
- 2. During drilling and logging of the hole for the production casing, the permittee shall identify any water bearing zones and isolate those zones in the annular space during cementing or completion activities.
- 3. The permittee shall be required to submit an affidavit covering the initial BOP pressure test after installation signed by the operator or contractor attesting to the satisfactory pressure test.
- 4. The permittee shall ensure tanks are adequately sized, designed and constructed for the reception and confinement of mud and cuttings and to prevent contamination of streams and potable water.
- 5. Drilled holes cannot be used for any other purposes unless they are constructed according to the applicable well construction standards administered by the Idaho Department of Water Resources.
- 6. Applicant will obtain any needed water rights from Idaho Department of Water Resources if nearby wells will be used to supply water for the drilling operations.
- 7. All well information required by Idaho Code § 47-324(4), IDAPA 20.07.02.340 and 341 will be submitted to IDL within 30 days of the logs being run.
- 8. Well Log information shall be submitted in paper and electronic formats as required by IDAPA 20.07.07.340.05. Paper copies shall be submitted on a minimum of 24 lb. Premium Pre Fold Bond Paper.
- 9. Idaho Department of Lands inspectors shall have 24 hour, unencumbered access for compliance and regulatory purposes.
- 10. All cementing operations shall be in accordance with IDAPA 20.07.02.310. Cement will be returned to surface on the surface casing via the pump and plug method or other method as approved by the Department.

- 11. This permit does not grant the right for ingress or egress nor does this application grant the right to production from unleased lands.
- 12. No production or drainage may occur until item 10 above has been met or the Commission has issued an order to satisfy item 10.
- 13. If the proposed targets described in Section 2 Geologic Prognosis of the submitted APD are hydrocarbon-bearing, no production may occur without a final processed angular deviation and directional survey being submitted to the Department.
- 14. If potential hydrocarbon-bearing zones are encountered other than the proposed targets described in Section 2 Geologic Prognosis of the submitted APD, no production may occur from those zones without authorization from the Department.

Please ensure that all operations are conducted in accordance with the requirements of IDAPA 20.07.02 (Rules Governing Conservation of Oil and Natural Gas in the State of Idaho).

This permit will be administered by IDL staff and possibly a contractor hired by IDL. We will be inspecting the drilling operation. Please contact me at 208-334-0298 if you have any questions.

Sincerely,

Mick Thomas

Division Administrator, Oil & Gas

cc: Patti Nitz, Payette County, 1130 3rd Ave. N., Payette, ID 83661 Chad Hersley, IDWR, PO Box 83720, Boise, Idaho 83720-0098



IDAHO OIL AND GAS CONSERVATION COMMISSION Application For Permit to Drill, Deepen, or Plug Back



APPLICATION TO: 🛛 Drill (\$2,000) 🔲 Deepen (\$500) 🔲 Plug Back (\$500)							
NAME OF OPERATOR: Alta Mesa Services, LP Date: September 1, 2017							
Address: 15021 Katy Freeway, Suite 400							
City: Houston State: TX Zip Code: 77094 Telephone: 281-530-0991							
Contact Name: Ronda Louderman Email Address: rlouderman@altamesa.net							
Emergency Contact Name/Phone: Wade Moore; 832-248-9390							
DESCRIPTION OF WELL AND LEASE							
Name of Lease: Fallon Well Number: 1-10 Elevation (ground): 2,155.2'							
Well Location: Section: 10 Township: 8N Range: 5W (or block and survey)							
(Give footage from Section lines): 2,042' from S line / 1,533' from W line							
Latitude/Longitude (Dec Degrees NAD83 minimum requirement): N44 02'43.920" /W116 55'35.727"							
Detum: DMCS94 DNAD92 MNAD27 DOther:							
Datum: WGS84 NAD83 NAD27 Other: County: Payette							
Distance, in miles, and direction from nearest town or post office: 2.49 miles from Fruitland Post Office							
Nearest distance from proposed location to property or lease line: 1,533 feet Nearest producing well: 28,696.2 fee							
Type of Test/Unit: ⊠Gas / 640 acre unit □Gas / 160 acre unit □Oil / 40 acre unit □Other/Docket No							
Is Operator requesting a well location exception? Yes No Confidential Well Status Request? Yes No							
Distance from proposed location to nearest drilling, completed or applied for on the same lease: 0							
Proposed depth: 5,432' MD/5,000' TVD Approx. date work will start: 09/25/2017							
Number of acres in lease(s): 640 in unit							
Number of wells on lease, including this well, completed in or drilling to this reservoir: 1							
If lease purchased with one or more wells drilled, complete the following information:							
Purchased from (Name): N/A							
Address of above:							
Bond Type and Number: Idaho OGCC Bond #B010798							
Burface Rights Owner (At proposed surface location): Name Fallon Enterprises, Inc. Phone: 925-447-6375							
Does the drilling unit contain state leases? 1 If yes, check all that apply:							
Does this application include the following actions? If yes, check all that apply:							
☐ Well Treatment ☐ Pit construction ☐ Directional or Horizontal Drilling							
Applications that include well treatments, pit construction, and directional drilling must provide attachments with the information required							
from the respective sections of IDAPA 20.07.02 and Idaho Code § 47-3. If these activities are not included in this application, then a							
separate application and approval will be required prior to commencement of any of these activities.							
Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone							
and expected new producing zone)							



IDAHO OIL AND GAS CONSERVATION COMMISSION Application For Permit to Drill, Deepen, or Plug Back

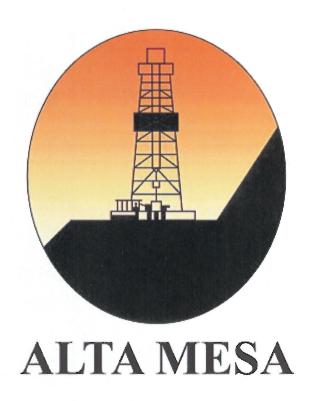


Applicant(s) should be familiar with and adhere to IDAPA 20.07.02, Rules Governing Conservation of Oil and Natural Gas in the State of Idaho, and Idaho Code § 47-3, Oil and Gas Wells--Geologic Information and Prevention of Waste.

Please check the boxes below to indicate that you have supplied the required information.

Maps Required
 Attach a survey plat or map, preferably on a scale of one (1) inch equals one thousand (1,000) feet, prepared by a licensed surveyor or engineer. The plat must show:
Distance of the proposed surface location to the nearest occupied structure and the nearest highway. The proposed well location. For directional wells, both surface and bottom hole locations should be marked. The location of the well with reference to the nearest lines of an established public survey. All leased tracts held by the applicant within the drilling unit. Distances of the proposed well from the two nearest unit boundary lines, if applicable, and from the nearest oil or gas wells on the same unit. completed in or being drilled to the same reservoir. If the well location requested is not in conformance with the applicable well-spacing rules, show all off-setting wells to the proposed well, and the names and addresses of all adjoining lease or property owners. The location of the nearest structure with a water supply, or the nearest water well as shown on the IDWR registry of water rights or well log database. The location of the nearest canal, ditch, or ordinary high-water mark of surface waters (§47-319(1)).
Other Required Information
Estimated depth to the top of the important geologic markers. Estimated depth to the top of the target formations. Information on the type of tools to be used. Proposed logging program. Proposed casing program, including size and weight of casing and the depth at which each casing type is to be set. Type and amount of cement to be used, and the intervals cemented. Information on the drilling plan (drill pad and rig set up, etc). Schematic diagram of the BOP and well head assemblies, including the minimum size and pressure rating of all components of the BOP and well head assemblies. Best management practices to be used for erosion and sediment control. Plan for interim reclamation of the drill site after the well is completed, and a plan for final reclamation of the drill site following plugging and abandonment of the well. These plans must contain the information needed to implement reclamation as described in IDAPA 20.07.02 subsection 310.16 and section 510.
CERTIFICATION: I, Ronda Louderman the undersigned, state that I am the Regulatory & Pipeline Supervisor
of Alta Mesa Services, LP (company) and that I am authorized by said company to make this
application, and that this application was prepared under my supervision and direction, and that the facts stated herein ar

true, correct and complete to the best of my knowledge. Date: Signature: NOTICE: Before submitting this form, be sure that you have given all information requested. IDL Office Use Only: Approval Date: $\underline{10/19/17}$ Approved by: Signature and Title US Well Number: 11-075-20032



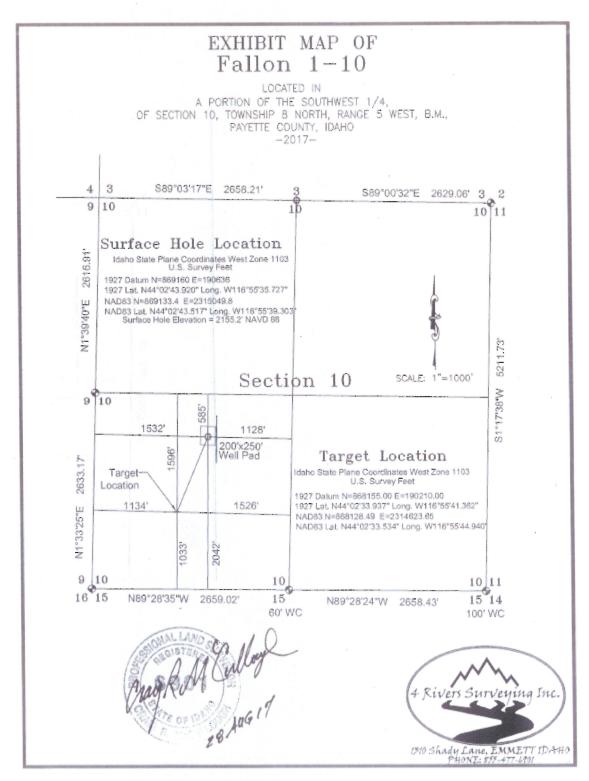
ES, EP ALTA MESA SERVICES, LP

IDL Permit Supplement
Fallon 1-10
Payette County, ID
September 1, 2017

1	Well	Plat	3
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1 Well Plat

All tracts within the unit are leased.

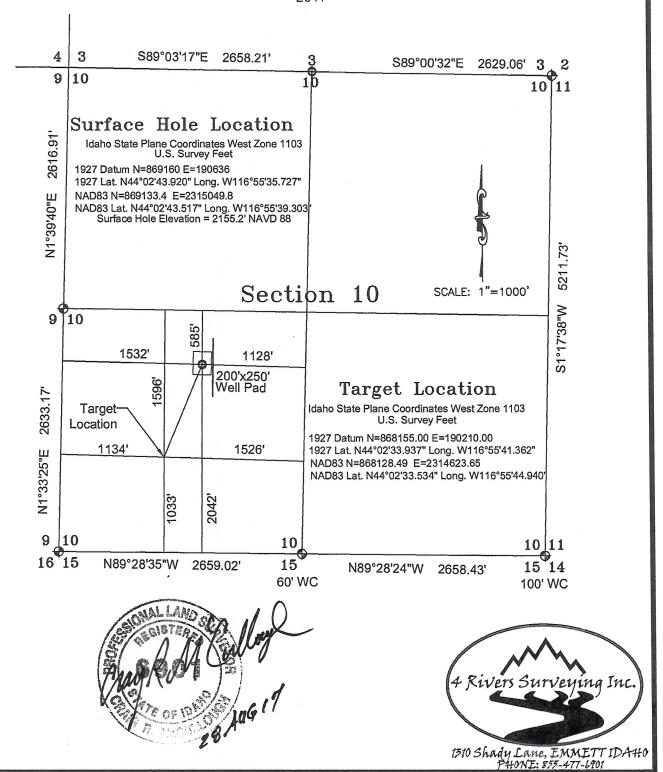


* SEE LARGER DIAGRAM ATTACHED

EXHIBIT MAP OF Fallon 1-10

LOCATED IN

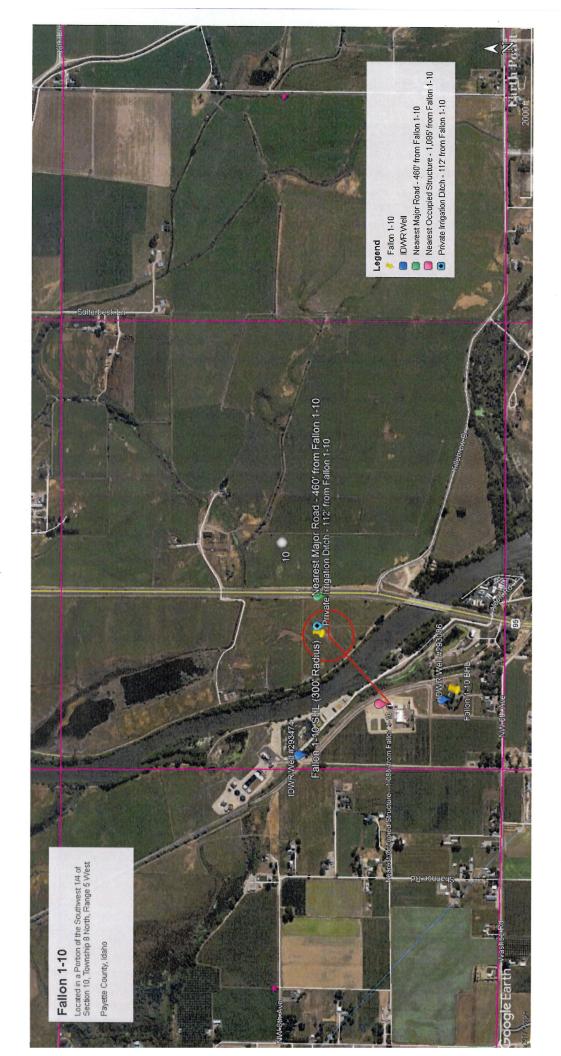
A PORTION OF THE SOUTHWEST 1/4,
OF SECTION 10, TOWNSHIP 8 NORTH, RANGE 5 WEST, B.M.,
PAYETTE COUNTY, IDAHO
-2017-



1.1 Well Plat Attachments



X SEE LARGER DIAGRAM ATTACHED
4 | Page



2 **Geologic Prognosis**



2.2 Proposed Well

The well is to be drilled as a "directional hole" to a depth of 5,432' MD/ 5,000' TVD. The surface location is in Section 10 – Township 8N – Range 5W (Payette County, Idaho). The surface location will be at N44°02'43.920" by W116°55'35.727". The target location will be at N44°02'33.937" by W116°55'41.362".

Per Idaho Code 47-319, attached is an email confirmation by the property owner to waive the 300' setback. The well will be located approximately 110' west of an existing concrete irrigation ditch.



2.4 Type of Tools Used

BHA #1: 12-1/4" Pendulum Drilling Assembly	
12-1/4" Mill tooth bit	. 9
Bit Sub w/ float	
(1) 8" Drill Collar	
12-1/4" Weld Blade Stabilizer (1/8" UG)	
(1) 8" Drill Collar	
12-1/4" Weld Blade Stabilizer (1/8" UG)	
X/O (if needed)	
(15) 4" HWDP	
Drilling Jars	
(5) 4" HWDP	
X/O to 4" Drill Pipe (if needed)	*

BHA #2: 8-1/2" Directional Drilling Assembly
8-1/2" Smith FDS+ or equivalent
Titan 6-3/4", 7/8, 1.83 ⁰ , 5.0 stage motor, 0.29 rev/gal
(1) 6-3/4" Float Sub
8" Spiral Integral Blade Stabilizer
6-3/4" Muleshoe Sub
6-3/4" Non-mag Drill Collar (MWD)
6-3/4" Non-mag Drill Collar
X/O (if needed)
(15) 4" Heavy Weight Drill Pipe
Drilling Jars
(5) 4" Heavy Weight Drill Pipe
4", 14.00 ppf, Grade G, XH Drill Pipe

3 Site Preparation

3.1 Erosion Control

Appropriate grading, mechanical stabilization (rip-rap or hay bales), chemical stabilization (soil cement), and silt fencing will be used to prevent soil erosion. All the cut and fill slopes are designed with a minimum 2:1 grade to minimize runoff erosion and ensure mechanical stability.

3.2 Sump

The location will have a 2' deep trench on downhill sides where the spoil from that trench will be used to construct an earthen berm around the location. The trench will act as a sump to collect rain and wash water for controlled release or appropriate disposal as required.

4 Well Construction

4.1 Casing Program

Well Interval	Bit Size/ Hole Size	Casing Size, Grade and Weight	Casing Setting Depth	Top of Cement	Cement Type and Volume
Conductor	20"	16" 65 ppf H-40	120'	Surface	200 sx, class A cement 200% excess
Surface	12 ¼"	9-5/8" 40 ppf K-55 LTC	1,100'	Surface	Lead: 235 sx RC Econolite Plus; Tail: 70sx RC Surface
Production	8 ½"	5-1/2" 17 ppf K-55 LTC	5,432'	Surface	Lead: 592 sx RC Gasbond; Tail: 305 sx RC Gasbond

Surface Casing

Item	Description			
1 each	9-5/8" Antelope Down Jet Float Shoe			
1 joint	9-5/8", 40.0 ppf, K-55, LTC (1- Bow Type Cent. @ 10' above shoe, 1- Bow Type Cent. @			
	Middle collar, 1- Bow Type Cent. @10' below float collar)			
1 each	9-5/8" Antelope Float Collar (c/w Non-Rotating Top plug)			
Jts to Surface	9-5/8", 40.0 ppf, K-55,LTC casing			
Cement Basket	Place a cement basket (80') below surface			
Centralizers	Antelope Bow Type: From FC – 1/jt for 5 jts; 1/jt every 4 th joint to surface.			

Production Casing

Item	Description
1 each	5-1/2" Antelope Down Jet (5M) Float Shoe
(2) joints	5-1/2", 17 ppf, K-55, LTC (1- Turbolizer Bow Spring Cent. @ 10' above shoe; 1-TBS Cent. @ Middle connection; 1 – TBS Cent. @ 10' below float collar)
1 each	5-1/2" Antelope (5M) Float Collar (c/w Top-Co, Non-Rotating, Top and Bottom plugs)
To 3,500'	5-1/2", 17 ppf, K-55, LTC; c/w one (1) TBS every joint over a collar (NOTE: Cable type wall scratchers will be run over zones of interest – to be determined)
To 1,000'	5-1/2", 17 ppf, K-55, LTC (c/w one (1) Bow Spring Cent. every joint over a collar)

4.2 Cementing Program

Conductor: 200 sx; Surface to 120'

Surface:

Fluid	Height (ft)	Volume (cu-ft)	Yield (cf/sx)	Density (ppg)	Description
Spacer		~		8.34	20 bbls, 4% KCL
Lead Slurry	To surface	730	3.11	11.0	235 sx, RC Econolite Plus; (150%) excess of open hole volume
Tail Slurry	100'	95.2	1.36	14.8	70 sx, Surface Tail; (100%) excess of open hole volume
Displacement				~9.0	79.6 bbls, Mud
Top Out Slurry		68	1.36	14.8	50 sx, Surface Tail

Depth: +/- 1,100', Hole size: 12-1/4", MW: 8.8 ppg, Est Frac Grad: 10.7 ppg

Production:

Fluid	Height (ft)	Volume (cu-ft)	Yield (cf/sx)	Density (ppg)	Description
Spacer				8.34	10 bbls Mud Flush
Spacer				11.0	25 bbls, 4% KCL weighted spacer
Lead Slurry	TOC @ Surface	1018	1.72	13.0	592 sxs Gasbond
Tail Slurry	1,600	415	1.36	14.2	305 sxs Premium Gasbond
Displacement				~8.4	124.1 bbls, 4% KCL water

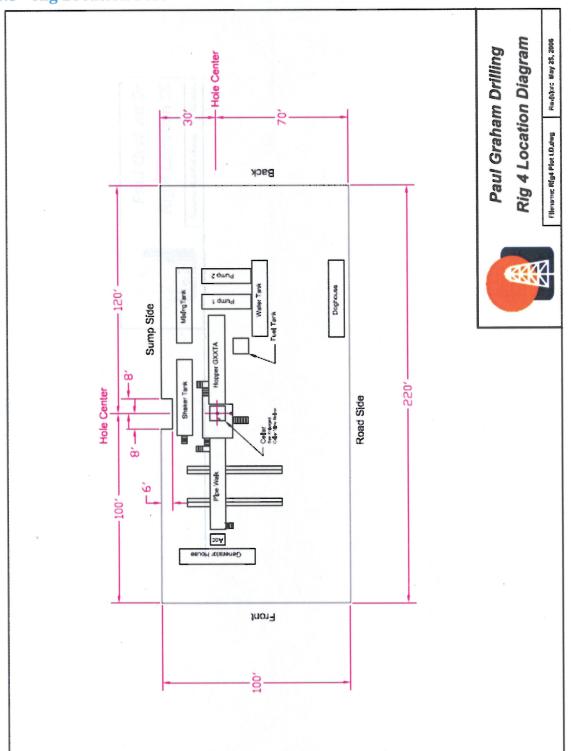
Depth: 5,432'; Hole Size: 8-1/2"; Excess: 15% above volume from OH caliper log

Fill Required:

Lead Cement: 3,832' fill; 15% above volume from OH caliper log, 0% excess inside casing

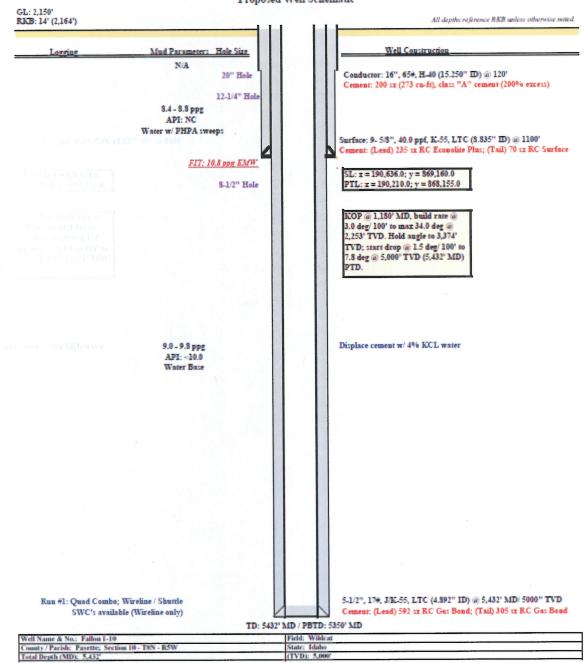
Tail Cement: 1,600' fill; 15% above volume from OH caliper log

4.3 Rig Location Plot



4.4 Proposed Wellbore Schematic

Alta Mesa Services, LP Fallon 1-10 Payette County, Idaho Proposed Well Schematic



X SEE LARGER DIAGRAM ATTACHED

Alta Mesa Services, LP

Fallon 1-10

Payette County, Idaho Proposed Well Schematic

GL: 2,150' RKB: 14' (2,164')

All depths reference RKB unless otherwise noted.

Logging Mud Parameters Hole Size

N/A

20" Hole

12-1/4" Hole

8.4 - 8.8 ppg
API: NC
Water w/ PHPA sweeps

FIT: 10.8 ppg EMW

8-1/2" Hole

9.0 - 9.8 ppg API: <10.0 Water Base Well Construction

Conductor: 16", 65#, H-40 (15.250" ID) @ 120'

Cement: 200 sx (273 cu-ft), class "A" cement (200% excess)

Surface: 9- 5/8", 40.0 ppf, K-55, LTC (8.835" ID) @ 1100'
Cement: (Lead) 235 sx RC Econolite Plus; (Tail) 70 sx RC Surface

SL: x = 190,636.0; y = 869,160.0 PTL: x = 190,210.0; y = 868,155.0

KOP @ 1,180' MD, build rate @ 3.0 deg/ 100' to max 34.0 deg @ 2,253' TVD. Hold angle to 3,374' TVD; start drop @ 1.5 deg/ 100' to 7.8 deg @ 5,000' TVD (5,432' MD) PTD.

Displace cement w/ 4% KCL water

Run #1: Quad Combo; Wireline / Shuttle SWC's available (Wireline only) 5-1/2", 17#, J/K-55, LTC (4.892" ID) @ 5,432' MD/ 5000" TVD Cement: (Lead) 592 sx RC Gas Bond; (Tail) 305 sx RC Gas Bond

TD: 5432' MD / PBTD: 5350' MD

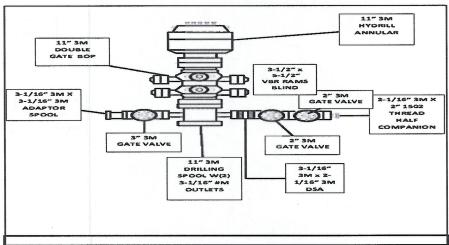
Well Name & No.: Fallon 1-10	Field: Wildcat	
County / Parish: Payette; Section 10 - T8N - R5W	State: Idaho	
Total Depth (MD): 5,432'	(TVD): 5,000'	

4.5 Blow-Out Preventers

4.5.1 BOP Hardware Configuration

Stack from bottom up; pipe rams, mud cross, blind rams and annular. Pressure control equipment to include upper Kelly cock, Kelly, lower Kelly valve, stand-by full opening drill string valve (TIW), stand-by drill string inside BOP (Gray).

4.5.2 BOP Diagram

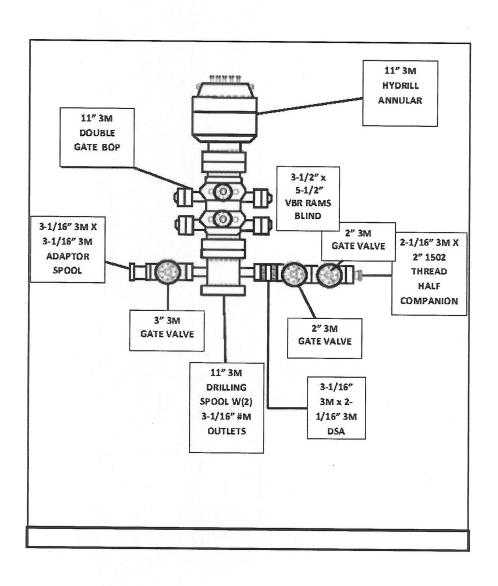


X STE LARGER DIAGRAM ATTACHED

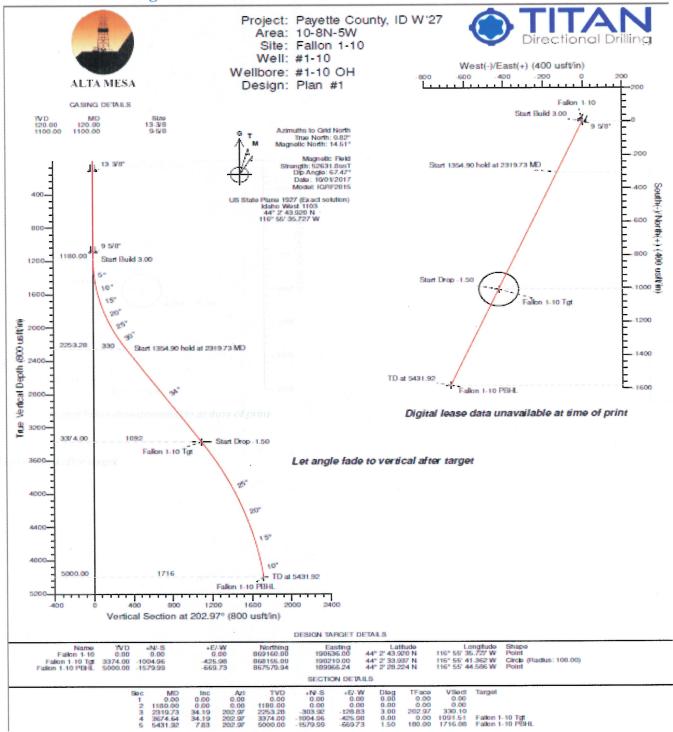
4.6 Drilling Plan – Expected to include but not limited to:

- 1. Drill 8-1/2" directional hole to a projected total depth at 5,432' MD / 5,000' TVD (see proposed directional plan).
- 2. Take surveys as required for 'directional" well.
- 3. Mud density should range between 9.4 ppg to 9.5 ppg prior to entering the objective sand at $(\sim 3,550^{\circ} \& 3,675^{\circ})$ TVD. Have (3.5-4.0) ppg excess lime in the system prior to entering the objective wildcat sand.
- 4. Record slow pump rate/ pressure for each pump on each tour; note results on daily drilling report and IADC report.
- 5. Short trip as required (above).
- 6. After reaching total depth (TD), make wiper trip to surface casing shoe. Run back to TD and CBU for logs; POOH.

BOP DIAGRAM



4.7 Directional Drilling Plan



* SEE LARGER DIAGRAM ATTACHED

Titan Directional Drilling, LLC Planning Report

Database: Company: EDM 5000.1 Single User Db

Alta Mesa

Site:

Project: Payette County, ID W'27 Fallon 1-10 #1-10 Well: #1-10 OH Wellbore: Design: Plan #1

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference: MD Reference: North Reference: Well #1-10

est GL+KB @ 2164.00usft (planning) est GL+KB @ 2164.00usft (planning)

Minimum Curvature

Project Payette County, ID W'27

Map System: Geo Datum:

US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS)

Map Zone: Idaho West 1103 System Datum:

Mean Sea Level

Using geodetic scale factor

Site Fallon 1-10, Centered on p1 SL

Site Position: From: Map Northing: Easting:

869,160.00 usft Latitude: 190,636.00 usft Longitude:

44° 2° 43,920 N 116° 55' 35.727 W

Position Uncertainty: 0.00 usft Slot Radius: 13-3/16 " Grid Convergence:

-0.82 *

Well #1-10 Well Position +N/-8

Position Uncertainty

0.00 usft +EIJW 0.00 usft

IGRF2015

0.00 usft

Northing: Eacting: Wellhead Elevation:

10/01/17

869,160.00 usft 190,636,00 usft 0.00 usft

13.69

Latitude: Longitude: Ground Level:

67.47

44° 2' 43.920 N 116° 55' 35.727 W 2,150.00 usft

52,632

#1-10 OH Wellbore Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (0) (°) (nT)

Design	Plan #1					
Audit Notes:						
Version:		Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:		Depth From (TVD) (ucft)	+N/-8 (usft)	+E/-W (usit)	Direction (°)	
		0.00	0.00	0.00	202.97	

Neasured Depth (usft)	Incilination (°)	Azimuth	Vertical Depth (ucft)	+N/-8 (ucit)	+E/-W (ucft)	Dogleg Rate (*/100ucft)	Build Rate (°/100ucft)	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	
1,180.00	0.00	0.00	1,180.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,319.73	34.19	202.97	2,253.28	-303.92	-128.83	3.00	3.00	0.00	202.97	
3,674.64	34.19	202.97	3,374.00	-1,004.96	-425.98	0.00	0.00	0.00	0.00	Fallon 1-10 Tgt
5,431.92	7.83	202.97	5,000.00	-1,579.99	-669.73	1.50	-1.50	0.00	190.00	Fallon 1-10 PBHL

Titan Directional Drilling, LLC Planning Report

Database:

Design:

EDM 5000.1 Single User Db

Company: Ata Mesa

Project: Payette County, ID W'27
8ite: Fallon 1-10
Well: #1-10
Wellbore: #1-10 OH

Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Wel #1-10

est GL+KB @ 2164.00usft (planning) est GL+KB @ 2164.00usft (planning)

Grid

Minimum Curvature

ned Survey									
Measured Depth		Azimuth	Vertical Depth	+N/-8	+E/-W	Vertical Section	Dogleg Rate	Bulld Rate	Turn Rate
(ucit)	(9)	(0)	(usti)	(usft)	(usit)	(usit)	(%100ucft)	(°/100usft)	(1/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.00	0:00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00
13 3/8"									
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
9 6/8"							Milword Line		
1,180.00	0.00	0.00	1,180.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.60	202.97	1,200.00	-0.10	-0.04	0.10	3.00	3.00	0.00
				2.42			3.00	3.00	0.00
1,300.00	3.60	202.97	1,299.92	-3.47 -11.65	-1.47 -4.94	3.77 12.66	3.00	3.00	0.00
1,400.00	9.60	202.97	1,498.50	-24.62	-10.44	26.75	3.00	3.00	0.00
1,500.00	12.60	202.97	1,596.62	-42.35	-17.95	46.00	3.00	3.00	0.00
1,700.00	15.60	202.97	1,693.60	-64.78	-27.46	70.35	3.00	3.00	0.00
1,800.00	18.60	202.97	1,789.17	-91.84	-38.93	99.75	3.00	3.00	0.00
1,900.00	21.60	202.97	1,883.07	-123.48	-52.34	134.12	3.00	3.00	0.00
2,000.00	24.60	202.97	1,975.04	-159.60	-67.65	173.35	3.00	3.00	0.00
2,100.00	27.60	202.97	2,064.83	-200.10 -244.87	-84.82 -103.80	217.34 265.96	3.00	3.00	0.00
2,200.00	30.60	202.97	2,152.20	-244.87					
2,300.00	33.60	202.97	2,236.90	-293.79	-124.53	319.10	3.00	3.00	0.00
2,319.73	34.19	202.97	2,253.28	-303.92	-128.83	330.10	3.00	3.00	0.00
2,400.00	3.73 34.19	202.97	2,319.67	-345.46	-146.43	375.21	0.00	0.00	0.00
2,500.00	34.19	202.97	2,402.39	-397.20	-168.36	431.41	0.00	0.00	0.00
2,600.00	34.19	202.97	2,485.10	-448.94	-190.30	487.60	0.00	0.00	0.00
2,700.00	34.19	202.97	2,567.82	-500.68	-212.23	543.80	0.00	0,00	0.00
2,800.00	34.19	202.97	2,650.54	-552.42	-234.16	600.00	0.00	0.00	0.00
2,900.00	34.19	202.97	2,733.25	-604.16	-256.09	656.19	0.00	0.00	0.00
3,000.00	34.19	202.97	2,815.97	-655.90	-278.02	712.39	0.00	0.00	0.00
3,100.00	34.19	202.97	2,898.68	-707.64	-299.95	768.59	0.00	0.00	0.00
3,200.00	34.19	202.97	2,981.40	-759.38	-321.89	824.78	0.00	0.00	0.00
3,300.00	34.19	202.97	3,064.12	-811.12	-343.82	880.98	0.00	0.00	0.00
3,400.00	34.19	202.97	3,146.83	-862.86	-365.75	937.18	0.00	0.00	0.00
3,500.00	34.19	202.97	3,229.55	-914.60	-387.68	993.37	0.00	0.00	0.00
3,600.00	34.19	202.97	3,312.26	-966.34	-409.61	1,049.57	0.00	0.00	0.00
3.674.64	34.19	202.97	3,374.00	-1.004.96	-425.98	1.091.51	0.00	0.00	0.00
3,700.00	33.81	202.97	3,395.03	-1,018.02	-431.52	1,105.70	1.50	-1.50	0.00
3.800.00	32.31	202.97	3.478.83	-1.058.24	-452.81	1,160.25	1.50	-1.50	0.00
3,900.00	30.81	202.97	3,564.04	-1,116.43	-473.23	1,212.59	1.50	-1.50	0.00
4,000.00	29.31	202.97	3,650.59	-1,162.55	-492.78	1,262.68	1.50	-1.50	0.00
4 400 00	27.81	202.97	3,738.41	-1,206.57	-511.44	1,310,49	1.50	-1.50	0.00
4,100.00	26.31	202.97	3,738.41	-1,248.46	-511.44	1,355.98	1.50	-1.50	0.00
4,300.00	24.81	202.97	3,917.67	-1,288.18	-546.03	1,399.13	1.50	-1.50	0.00
4,400.00	23.31	202.97	4,008.98	-1,325.72	-561.95	1,439.90	1.50	-1.50	0.00
4,500.00	21.81	202.97	4,101.33	-1,361.04	-576.92	1,478.27	1.50	-1.50	0.00
							1.50	-1.50	0.00
4,600.00	20.31	202.97 202.97	4,194.64 4,288.87	-1,394.13 -1,424.95	-590.94 -604.01	1,514.20	1.50	-1.50	0.00
4,700.00 4,800.00	18.81	202.97	4,383.94	-1,444.99 -1,453.50	-616.11	1,578.69	1.50	-1.50	0.00
4,900.00	15.81	202.97	4,479.79	-1,479.74	-627.23	1,575.65	1.50	-1.50	0.00
5,000.00	14.31	202.97	4,576.35	-1,503.67	-637.37	1,633.17	1.50	-1.50	0.00
5,100.00	12.81	202.97	4,673.56	-1,525.25	-646.53	1,656.62	1.50	-1.50	0.00
5,200.00	11.31	202.97	4,771.35	-1,544.49	-654.68	1,677.52	1.50	-1.50	0.00
5,300.00	9.81	202.97	4,869.65	-1,561.37	-661.83	1,695.85	1.50	-1.50	0.00
5,400.00	8.31	202.97	4,968.40	-1,575.87	-667.98	1,711.60	1.50 1.50	-1.50 -1.50	0.00
5,431.92	7.83	202.97	5,000.00	-1,579.99	-669.73	1,716.08	1.50	-1.50	0.00

Titan Directional Drilling, LLC Planning Report

Database: Company: Project: EDM \$000.1 Single User Db Alta Mesa

Alta Mesa Payette County, ID W'27

 Site:
 Failon 1-10

 Well:
 #1-10

 Wellbore:
 #1-10 OH

 Design:
 Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: Survey Calculation Method: Well #1-10 est GL+KB

est GL+KB @ 2164.00usft (planning) est GL+KB @ 2164.00usft (planning)

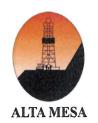
Grid

Minimum Curvature

Decign Targets									
Target Name									
- hit/miss target - Shape	Dip Angle (2)	Dip Dir. (°)	TVD (usft)	+N/-8 (usft)	+E/-W (ucit)	Northing (usft)	Easting (usft)	Latitude	Longitude
Fallon 1-10 - plan hits target cents - Point	0.00 er	360.00	0.00	0.00	0.00	869,160.00	190,636.00	44° 2' 43.920 N	116° 55' 35.727 W
Fallon 1-10 Tgt - plan hits target cents - Circle (radius 100.00		360.00	3,374.00	-1,004.96	-425.98	868,155.00	190,210.00	44° 2' 33.937 N	116" 55' 41.362 W
Fallon 1-10 PBHL - plan hits target cent - Point	0.00 er	0.00	5,000.00	-1,579.99	-669.73	867,579.94	189,966.25	44° 2′ 28.224 N	116" 55' 44.586 W

Casing Points							
	Meacured Depth (ucft)	Vertical Depth (usft)		Name	Casing Diameter (")	Hole Diameter	
	120.00	120.00 1,100.00	13 3/8" 9 5/8"		13-3/8 9-5/8	17-1/2 12-1/4	

07/26/17 11:00:52AM Page 3 COMPASS 6000.1 Build 76



CASING DETAILS

MD 120.00 1100.00 Size TVD 120.00 1100.00 13-3/8 9-5/8

400

800

1200

1600

13 3/8"

9 5/8"

10°

15°

330

20°

25° зo°

Start Build 3.00

1180.00

2253.28



Azimuths to Grid North True North: 0.82° Magnetic North: 14.51°

Area: 10-8N-5W Site: Fallon 1-10 Well: #1-10

Wellbore: #1-10 OH

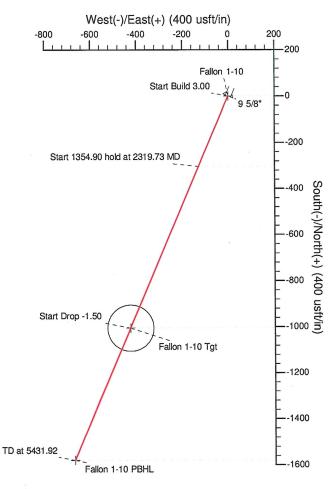
Design: Plan #1

Project: Payette County, ID W'27

Magnetic Field Strength: 52631.8snT Dip Angle: 67.47° Date: 10/01/2017 Model: IGRF2015

US State Plane 1927 (Exact solution) Idaho West 1103 44° 2' 43.920 N 116° 55' 35.727 W





Digital lease data unavailable at time of print

True Vertical Depth (800 usfVin) 3374.00 1092 Start Drop -1.50 Fallon 1-10 Tgt 3600 Let angle fade to vertical after target 25° 4000 20° 4400 15° 4800-10° 5000.00 1716 TD at 5431.92 Fallon 1-10 PBHL 5200 800 1200 1600 2000 2400 400 -400 Vertical Section at 202.97° (800 usft/in)

Start 1354.90 hold at 2319.73 MD

DESIGN TARGET DETAILS

Name Fallon 1-10 Fallon 1-10 Tgt Fallon 1-10 PBHL	TVD 0.00 3374.00 5000.00	+N/-S 0.00 -1004.96 -1579.99			Northing 869160.00 868155.00 867579.94	1906 1902	10.00	Lat 44° 2' 43.9 44° 2' 33.9 44° 2' 28.2	37 N	116° 55' 3 116° 55' 4 116° 55' 4	1.362 W	Shape Point Circle (Radius: 100.00) Point	
		1 200 2000				SECTION	ON DETAIL	LS					
	S	ec MD 1 0.00 2 1180.00 3 2319.73 4 3674.64 5 5431.92	Inc 0.00 0.00 34.19 34.19 7.83	Azi 0.00 0.00 202.97 202.97 202.97	TVD 0.00 1180.00 2253.28 3374.00 5000.00	+N/-S 0.00 0.00 -303.92 -1004.96 -1579.99	+E/-W 0.00 0.00 -128.83 -425.98 -669.73	0.00 0.00 3.00 0.00	TFace 0.00 0.00 202.97 0.00 180.00	VSect 0.00 0.00 330.10 1091.51 1716.08	Target Fallon 1 Fallon 1	-10 Tgt -10 PBHL	

Titan Directional Drilling, LLC

Planning Report

Database: Company: EDM 5000.1 Single User Db

Alta Mesa

Project:

Site: Well: Wellbore: Payette County, ID W'27 Fallon 1-10

#1-10 #1-10 OH Plan #1

Idaho West 1103

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well #1-10

est GL+KB @ 2164.00usft (planning) est GL+KB @ 2164.00usft (planning)

Minimum Curvature

Design: Project

Payette County, ID W'27

Map System: Geo Datum:

US State Plane 1927 (Exact solution)

NAD 1927 (NADCON CONUS)

System Datum:

Mean Sea Level

Using geodetic scale factor

Map Zone: Site

Fallon 1-10, Centered on p1 SL

Site Position: From:

Map

Northing:

869,160.00 usft 190,636.00 usft

Latitude:

Longitude:

44° 2' 43.920 N

Position Uncertainty:

#1-10

Easting: 0.00 usft

Slot Radius:

13-3/16 "

Grid Convergence:

116° 55' 35.727 W

-0.82°

Well Well Position

+N/-S

0.00 usft +E/-W 0.00 usft

Northing: Easting:

869,160.00 usft 190,636.00 usft

13.69

Latitude: Longitude: 44° 2' 43.920 N

Position Uncertainty

0.00 usft

Wellhead Elevation:

10/01/17

0.00 usft

Ground Level:

116° 55' 35.727 W

52,632

2,150.00 usft

Wellbore Magnetics

Model Name

IGRF2015

#1-10 OH

Sample Date

Declination

Dip Angle

Field Strength

(nT)

Plan #1 Design

Audit Notes:

Version:

Phase:

PROTOTYPE

Tie On Depth:

0.00

67.47

Vertical Section:

Depth From (TVD) (usft) 0.00

+N/-S (usft) 0.00

+E/-W (usft) 0.00

Direction (°) 202.97

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,180.00	0.00	0.00	1,180.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,319.73	34.19	202.97	2,253.28	-303.92	-128.83	3.00	3.00	0.00	202.97	
3,674.64	34.19	202.97	3,374.00	-1,004.96	-425.98	0.00	0.00	0.00	0.00	Fallon 1-10 Tgt
5,431.92	7.83	202.97	5,000.00	-1,579.99	-669.73	1.50	-1.50	0.00	180.00	Fallon 1-10 PBHL

Titan Directional Drilling, LLC

Planning Report

Database: Company: EDM 5000.1 Single User Db

Alta Mesa

Plan #1

Project: Site:

Design:

Payette County, ID W'27

Fallon 1-10 Well: #1-10 #1-10 OH Wellbore:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well #1-10

est GL+KB @ 2164.00usft (planning) est GL+KB @ 2164.00usft (planning)

Minimum Curvature

Planned	Survey
laimeu	Survey

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (usft)	Inclination	Azimuth	Depth (usft)	+N/-S	+E/-W	Section	Rate	Rate (°/100usft)	Rate (°/100usft)
	(°)	(°)	(usit)	(usft)	(usft)	(usft)	(°/100usft)	(/ loousit)	(/ louisit)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00
13 3/8"									
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
1,180.00	0.00	0.00	1,180.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.60	202.97	1,200.00	-0.10	-0.04	0.10	3.00	3.00	0.00
1,300.00	3.60	202.97	1,299.92	-3.47	-1.47	3.77	3.00	3.00	0.00
1,400.00	6.60	202.97	1,399.51	-11.65	-4.94	12.66	3.00	3.00	0.00
1,500.00	9.60	202.97	1,498.50	-24.62	-10.44	26.75	3.00	3.00	0.00
1,600.00	12.60	202.97	1,596.62	-42.35	-17.95	46.00	3.00	3.00	0.00
1,700.00	15.60	202.97	1,693.60	-64.78	-27.46	70.35	3.00	3.00	0.00
1,800.00 1,900.00	18.60 21.60	202.97 202.97	1,789.17 1,883.07	-91.84 123.49	-38.93	99.75	3.00	3.00	0.00
2,000.00	24.60	202.97	1,883.07	-123.48 -159.60	-52.34 67.65	134.12	3.00	3.00	0.00
2,000.00	27.60	202.97	2,064.83	-159.60 -200.10	-67.65 -84.82	173.35 217.34	3.00	3.00	0.00
2,100.00	30.60	202.97	2,064.83	-200.10 -244.87	-84.82 -103.80	265.96	3.00 3.00	3.00 3.00	0.00 0.00
,									
2,300.00	33.60	202.97	2,236.90	-293.79	-124.53	319.10	3.00	3.00	0.00
2,319.73	34.19	202.97	2,253.28	-303.92	-128.83	330.10	3.00	3.00	0.00
2,400.00	34.19	202.97	2,319.67	-345.46	-146.43	375.21	0.00	0.00	0.00
2,500.00	34.19	202.97	2,402.39	-397.20	-168.36	431.41	0.00	0.00	0.00
2,600.00	34.19	202.97	2,485.10	-448.94	-190.30	487.60	0.00	0.00	0.00
2,700.00	34.19	202.97	2,567.82	-500.68	-212.23	543.80	0.00	0.00	0.00
2,800.00	34.19	202.97	2,650.54	-552.42	-234.16	600.00	0.00	0.00	0.00
2,900.00	34.19	202.97	2,733.25	-604.16	-256.09	656.19	0.00	0.00	0.00
3,000.00	34.19	202.97	2,815.97	-655.90	-278.02	712.39	0.00	0.00	0.00
3,100.00	34.19	202.97	2,898.68	-707.64	-299.95	768.59	0.00	0.00	0.00
3,200.00	34.19	202.97	2,981.40	-759.38	-321.89	824.78	0.00	0.00	0.00
3,300.00	34.19	202.97	3,064.12	-811.12	-343.82	880.98	0.00	0.00	0.00
3,400.00	34.19	202.97	3,146.83	-862.86	-365.75	937.18	0.00	0.00	0.00
3,500.00	34.19	202.97	3,229.55	-914.60	-387.68	993.37	0.00	0.00	0.00
3,600.00	34.19	202.97	3,312.26	-966.34	-409.61	1,049.57	0.00	0.00	0.00
3,674.64 3,700.00	34.19 33.81	202.97	3,374.00	-1,004.96	-425.98 421.52	1,091.51	0.00	0.00	0.00
3,800.00		202.97 202.97	3,395.03	-1,018.02	-431.52	1,105.70	1.50	-1.50	0.00
3,900.00	32.31 30.81	202.97	3,478.83 3,564.04	-1,068.24 -1,116.43	-452.81 -473.23	1,160.25	1.50	-1.50 1.50	0.00
4,000.00	29.31	202.97	3,650.59	-1,116.43	-473.23 -492.78	1,212.59 1,262.68	1.50 1.50	-1.50 -1.50	0.00 0.00
4,100.00	27.81	202.97	3,738.41	-1,206.57	-511.44	1,310.49	1.50	-1.50	0.00
4,200.00	26.31	202.97	3,827.46	-1,248.46	-529.20	1,355.98	1.50	-1.50	0.00
4,300.00	24.81	202.97	3,917.67	-1,288.18	-546.03	1,399.13	1.50	-1.50	0.00
4,400.00	23.31	202.97	4,008.98	-1,325.72	-561.95	1,439.90	1.50	-1.50	0.00
4,500.00	21.81	202.97	4,101.33	-1,361.04	-576.92	1,478.27	1.50	-1.50	0.00
4,600.00	20.31	202.97	4,194.64	-1,394.13	-590.94	1,514.20	1.50	-1.50	0.00
4,700.00	18.81	202.97	4,288.87	-1,424.95	-604.01	1,547.68	1.50	-1.50	0.00
4,800.00	17.31	202.97	4,383.94	-1,453.50	-616.11	1,578.69	1.50	-1.50	0.00
4,900.00	15.81	202.97	4,479.79	-1,479.74	-627.23	1,607.19	1.50	-1.50	0.00
5,000.00	14.31	202.97	4,576.35	-1,503.67	-637.37	1,633.17	1.50	-1.50	0.00
5,100.00	12.81	202.97	4,673.56	-1,525.25	-646.53	1,656.62	1.50	-1.50	0.00
5,200.00	11.31	202.97	4,771.35	-1,544.49	-654.68	1,677.52	1.50	-1.50	0.00
5,300.00	9.81	202.97	4,869.65	-1,561.37	-661.83	1,695.85	1.50	-1.50	0.00
5,400.00	8.31	202.97	4,968.40	-1,575.87	-667.98	1,711.60	1.50	-1.50	0.00
5,431.92	7.83	202.97	5,000.00	-1,579.99	-669.73	1,716.08	1.50	-1.50	0.00

Titan Directional Drilling, LLC

Planning Report

Database: Company: EDM 5000.1 Single User Db

Alta Mesa

Project:

Payette County, ID W'27

Site: Well: Wellbore: Payette County, ID W'2 Fallon 1-10

#1-10 #1-10 OH Plan #1 Local Co-ordinate Reference:

TVD Reference:

North Reference: Survey Calculation Method: Well #1-10

est GL+KB @ 2164.00usft (planning) est GL+KB @ 2164.00usft (planning)

Grid

Minimum Curvature

Design: F	Plan #1								
Design Targets		TO SECURE OF THE SECURE							
Target Name - hit/miss target - Shape	Dip Angle	Dip Dir.	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Fallon 1-10 - plan hits target cent - Point	0.00 er	360.00	0.00	0.00	0.00	869,160.00	190,636.00	44° 2' 43.920 N	116° 55' 35.727 W
Fallon 1-10 Tgt - plan hits target cent - Circle (radius 100.0		360.00	3,374.00	-1,004.96	-425.98	868,155.00	190,210.00	44° 2' 33.937 N	116° 55' 41.362 W
Fallon 1-10 PBHL - plan hits target cent - Point	0.00 ter	0.00	5,000.00	-1,579.99	-669.73	867,579.94	189,966.25	44° 2' 28.224 N	116° 55' 44.586 W

Casing Points							
	Measured	Vertical			Casing	Hole	
	Depth	Depth			Diameter	Diameter	
	(usft)	(usft)		Name	(")	(")	
	120.00	120.00	13 3/8"		13-3/8	17-1/2	
	1,100.00	1,100.00	9 5/8"		9-5/8	12-1/4	

4.8 Logging Plan

AFE #: TBD

IDL Permit Supplement

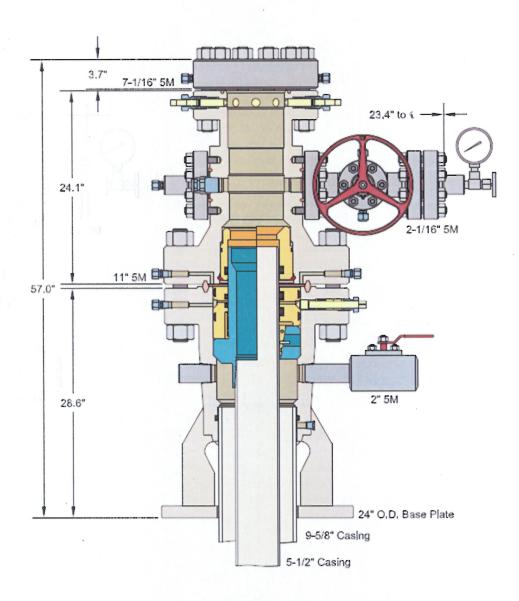
Open Hole Logging Program 1,100' - 5,432':

Run 1: Quad Combo; Wireline or Shuttle

SWC's available (Wireline only)

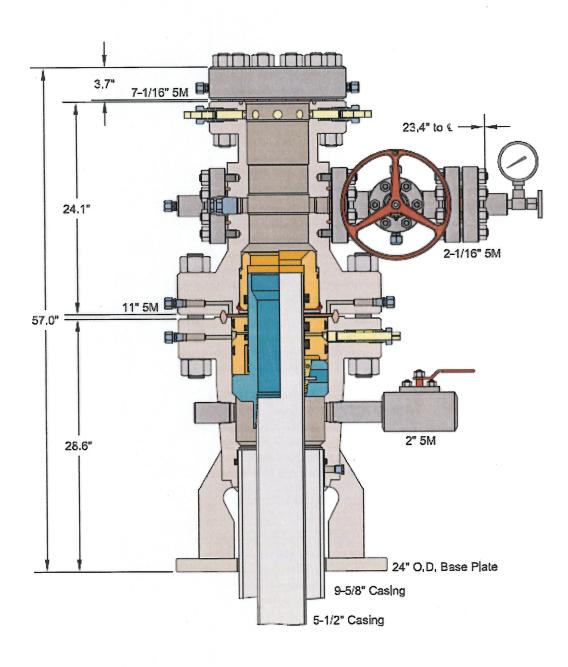
5 Wellhead

5.1 Surface Wellhead System

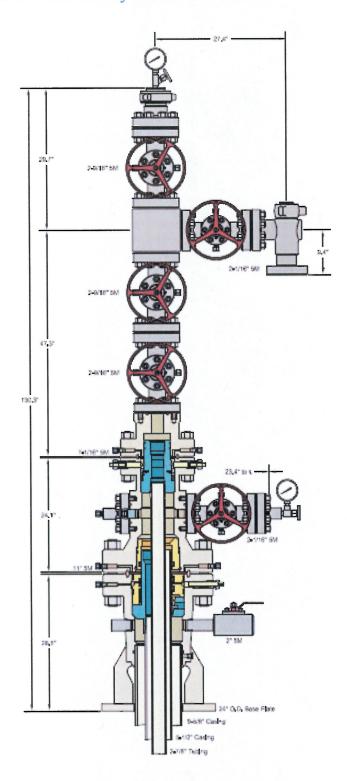


* SEE LARGER DIAGRAM ATTACHED

Surface Wellhead System

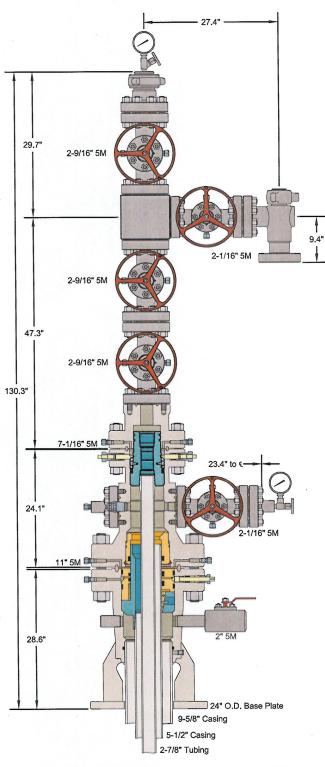


5.2 Complete Wellhead System with Tree



X SEE LARGER DIAGRAM ATTACHED





ALL DIMENSIONS ARE APPROXIMATE

This drawing is the property of GE Oil & Gas Pressure Control LP and is considered confidential. Unless otherwise approved in writing, neither it nor its contents may be used, copied, transmitted or reproduced except for the sole purpose of GE Oil & Gas Pressure Control LP.

9-5/8" x 5-1/2" x 2-7/8" 5M SH2-R Wellhead Assembly, With T-EBS Tubing Head, T-EN Tubing Hanger and A5PEN Adapter Flange

ALTA MESA HOLDINGS, LP PAYATTE COUNTY

DRAWN VJK 29APR14
APPRV KN 29APR14

FOR REFERENCE ONLY DRAWING NO.

AE25547

6 Reclamation

Reclamation will be conducted in accordance with IDAPA 20.07.02.310.16;.510. To achieve those requirements, Alta Mesa Services, L.P. proposes to address reclamation through a multistep process which is outlined below. As provided for in IDAPA 20.07.02.510.08, Alta Mesa Services, L.P. may enter into a Surface Use Agreement with the landowner the terms of which will ensure that the site is left in a stable, non-eroding condition as required.

- 1. Interim drill site clean-up: Debris and waste materials including, but not limited to, concrete, sack bentonite and other drilling mud additives, sand, plastic, pipe, and cable associated with the drilling, re-entry, or completion operations shall be removed and disposed of properly.
- 2. Re-establish slope stability, surface stability, and desired topographic diversity.
 - Reconstruct the landscape to the approximate original contour unless otherwise provided for in the Surface Use Agreement
 - b. Maximize geomorphic stability and topographic diversity of the reclaimed topography.
 - c. Eliminate high walls, cut slopes, and/or topographic depressions on site, unless otherwise approved.
 - d. Minimize sheet and rill erosion on the reclaimed area. Eliminate mass wasting, head cutting, large rills or gullies, down cutting in drainages, or overall slope instability on the reclaimed area.
- 3. Maintain the integrity of the topsoil and subsoil (where appropriate and not otherwise dictated by the Surface Use Agreement)
 - a. Identify salvaged topsoil and subsoil.
 - b. Segregation of salvaged soils to protect those materials from erosion, degradation, and contamination.
 - c. Incorporate stored soil material into the disturbed landscape to the extent practicable.
 - d. Stockpiled soils to be stored beyond one growing season shall be stabilized with appropriate vegetation
 - e. Record location and approximate volumes of stockpiles.
- 4. Prepare site for revegetation upon completion of well activities plugging/abandonment.
 - a. Redistribute soil materials in a manner similar to the original vertical profile.
 - b. Reduce compaction to an appropriate depth (generally below the root zone) prior to redistribution of topsoil, to accommodate appropriate site-specific plant species.
 - c. Provide suitable conditions to support the long-term establishment and viability of the desired plant community.
 - d. Protect seed and seedling establishment (e.g. erosion control matting, mulching, hydro-seeding, surface roughening, fencing, etc. to be determined based upon site specific conditions
- 5. Establish a desired self-perpetuating native plant community based upon region specific guidance available from NRCS
 - a. Establish species composition, diversity, structure, and total ground cover appropriate for the desired plant community
 - b. Select genetically appropriate and locally adapted native plant materials based on the site characteristics and setting.
 - i. Seed mixtures shall be selected based on soil type, site conditions and intended final use
 - ii. Seed shall not be used later than one year after the test date that appears on the label.
 - iii. The bags of seed shall be clearly labeled indicating test date, weed percentage or % Pure Live Seed (PLS), viability or germination percentage, and inert material
 - c. Select non-native plants only as a short term and non-persistent alternative to native plant materials. Ensure the non-natives are designed to aid in the re-establishment of native plant communities. Revegetate in accordance with best practices described below:

- i. Re-spread topsoil to a minimum depth of 4 inches.
- ii. Prepare a friable but firm and weed free seedbed that is not compacted by prior construction work.
- iii. Appropriate firmness can be estimated when a person leaves about a ¼ inch deep footprint.
- iv. Remove rocks, twigs, concrete, foreign material and clods over 2 inches that can't be broken down.
- v. Soil moisture content shall be at least 30% soil capacity (estimated). Do not seed into undesirable moisture conditions (e.g. "dust" or "mud").
- d. Plant communities shall be evaluated annually for two years to ensure revegetation success as determined by IDAPA 20.07.02.510.07.
 - i. Repair and reseed areas that have erosion damage as necessary.
 - ii. If a stand has less than 70% ground cover after two years, re-evaluate the choice of plant materials, methods and available light and moisture. Re-establish the stand with modifications based on the evaluation
- 6. Reestablish initial visual composition
 - a. Ensure the reclaimed landscape features conform to the prior conditions of the site.

Payette County, ID September 1, 2017

7 Attachment - As referenced in Section 2.2

From: Malcolm Leader-Picone [mailto:mlp@leader-picone.com]
Sent: Friday, August 04, 2017 4:52 PM
To: Michael Christian; Wade Moore III; nancy bankhead
Subject: RE: New well location

Michael:

Ms. Bankhead and Fallon Enterprises, Inc. do not object to the revised location for the well.

Malcolm

At 01:47 PM 8/3/2017, Wade Moore III wrote:

Nancy

Regarding the oil and gas well we have planned to drill which will be located in the SW14 of SN5W section 10. Do we have your consent to locate this well approx.. 110 feet west of the existing concrete irrigation ditch that dissects the field we will be in?

Thank you,

Wade Moore, III Senior Landman AM Idaho, LLC 250 Bobwhite Ct., Suite 350 Boise, Idaho 33706 Office: 208-473-7021 Cell: 579-676-1593 wade.moore@altamesa.net

Honston Office: Alta Mesa Holdings, L.P. 15021 Katy Freeway, Suite 400 Honston, Texas 77094 Office: 281-530-0991

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*Also Admitted to the California State Bar

September 6, 2017

James Thum Oil and Gas Program Manager Idaho Department of Lands 300 N. 6th St., Suite 103 Boise, ID 83702

Re: Fallon #1-10 well

Dear James:

This letter is to accompany the Application for Permit to Drill for the planned Fallon #1-10 well.

The text associated with the "Prospect" (2.1) and "Estimated Geological Formation Tops" (2.2) sections of the Permit Supplement should be redacted as trade secrets pursuant to the Idaho Public Records Act, Idaho Code § 74-107(1), in that they constitute compilations and/or unpublished research, resulting from the application of proprietary techniques, that: (a) derive independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by other persons who can obtain economic value from their disclosure or use; and (b) are the subject of efforts by AM that are reasonable under the circumstances to maintain their secrecy.

AM invested several million dollars to acquire the seismic data including the area of the proposed wells, and has developed significant expertise in interpreting that data based on its experience in the Payette Basin. It is currently the only operator investing in drilling in the Basin and generating data from its drilling activities, and thus is the only operator that can combine seismic data with drilling experience to make interpretations of seismic data. Consequently, the information for which redaction is requested is not generally known to, and is

DEPT. OF LANDS 2017 SEP -6 PM 3: 43

not readily ascertainable by proper means by AM's competitors. Thus, the information has actual economic value. Competitors of AM have made public efforts to obtain data generated by AM in order to assist their own exploration efforts without having to commit to similar investment and risk. AM has taken reasonable steps to maintain the secrecy of its data. It is maintained in a secure area, only employees with a specific need to know are allowed access to such data, and submissions of such data to regulating authorities are accompanied by an appropriate claim of exemption from disclosure.

In addition to the exemption from disclosure under Idaho Code §74-107(1), the materials are exempt from disclosure under Idaho Code § 74-108(1), in that they constitute records identifying the location of geophysical sites not already known to the general public.

- 2. In compliance with IDAPA 20.07.02.330, AM provides the following information. Some of the information is already present in the APD.
 - a. Name and Address of Operator: Alta Mesa Services, LP, 15021 Katy Freeway, Suite 400, Houston, TX 77094.
 - b. Lease name: Fallon Enterprises.
 - c. Well number: TBD.
 - d. Name of field and reservoir: Wildcat.
 - e. County: Payette.
 - f. Description and sketch of surface location and proposed producing interval: See the well plat attached to the Fallon #1-10 APD, under Section 1 of the Permit Supplement.
 - g. List of offset operators: None (AM is offset operator in all adjacent spaced areas).
 - h. Signature of representative of owner: the APD is signed by AM's representative, Ronda Louderman.

Please let me know if you have any questions regarding any of the above.

Very truly yours,

MARCUS, CHRISTIAN, HARDEE & DAVIES, LLP

Michael Christian

MC:

Cc: David Pepper, AM Idaho

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September 8, 2017

2017 SEP 1.1 PH 12: 05
BOISE, JAMO

VIA EMAIL

James Thum
Oil and Gas Program Manager
Idaho Department of Lands
300 N. 6th St., Suite 103
Boise, ID 83702

Re: Fallon #1-10, Barlow #1-14, Barlow #2-14

Dear James:

Further to our phone call yesterday, to clarify the APD materials for above-referenced wells:

- A map of leased tracts is not included because 100% of the tracts in each unit are under lease to AM Idaho LLC, either directly or following integration. Section 1 of the Permit Supplement Materials for each application contains the notation, "All tracts within the unit are leased." That was intended to indicate that all tracts in the unit are committed to AMI.
- 2. The docket numbers associated with each well are:
 - a. Fallon #1-10: CC-2016-OGR-01-004
 - b. Barlow #1-14 and #2-14: CC-2016-OGR-01-001

Please give me a call if you have questions about any of the above.

Very truly yours,

MARÇUS, CHRISTJAN, HARDEE & DAVIES, LLP

Michael Christian

MC:

Cc: David Pepper, AM Idaho