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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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

James Classen Ken Smith Margaret Chipman Chris Beck Sid Cellan

September 17, 2014

Ronda Louderman Regulatory Coordinator 15021 Katy Frwy., Suite 400 Houston, TX 77094

SUBJECT: Permit to Drill API#11-075-20027-01, Kauffman 1-9

The Idaho Department of Lands has completed our review of this application for multiple zone completion. Enclosed is a copy of the approved amended permit. This permit was approved with the following stipulations:

- 1. All well log information required by IDAPA 20.07.02.091 will be submitted to IDL within 30 days of the logs being run.
- 2. Idaho Department of Lands inspectors shall have 24 hour, unencumbered access for compliance and regulatory purposes.
- 3. All cementing operations shall be in accordance with IDAPA 20.07.02.050. Cement will be returned to surface on all string via the squeeze method as approved by the Department.
- 4. This permit does not grant the right for ingress or egress nor does this application grant the right to production from unleased lands.
- 5. Within 30 days of the conclusion of the completion work, a completion report must be submitted to the Department.

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

This amended permit will be administered by AJ Mondor in our Southwest Supervisory Area. He will be inspecting the drilling operation. Please contact him at 208-334-3488 if you have any questions.

Sincerely,

Robert R. Johnson P.G.

Oil & Gas Program Manager

cc: AJ Mondor, Resource Specialist, IDL Southwest Office Chad Hersley, IDWR, PO Box 83720, Boise, Idaho 83720-0098





IDAHO OIL AND GAS CONSERVATION COMMISSION Application For Permit to Drill, Deepen or Plug BackEPT. OF LANDS

APPLICATION TO: Drill (\$2,000) Deepen (\$500) Plug Bask (\$500) 1 2: 59
NAME OF COMPANY OR OPERATOR: Alta Mesa Services, LP Date: 59/15/2014
Address:
City: Houston State: TX Zip Code: 77094 Telephone: 281-530-0991
Contact Name: Ronda Louderman Email Address: rlouderman@altamesa.net
DESCRIPTION OF WELL AND LEASE
Name of Lease: Kauffman Well Number: 1-9 Flevation (ground) 2,606 feet
Well Location: Section: 9 Township: 8 North Range: 4 West (or block and survey Surface Location-1325' from East Section Line, 190' from North Line, Boltom Hole Location-397' from North Section Line, 9 Township: 8 North Range: 4 West (or block and survey) Surface Location-1325' from East Section Line, 190' from North Line, Boltom Hole Location-397' from North Section Line,
(give footage from Section lines): Surface Location-1325' from East Section Line, 190' from North Line, Bottom Hole Location-397' from North Section Line, 931' from East Section Line
Field and Reservoir (if wildcat, so state): Willow County: Payette
Distance, in miles, and direction from nearest town or post office: 5.49 miles East
Nearest distance from proposed location to property or lease line: Surface-50' from West Lease Line; Boltom-397' from North Lease Line feet
Distance from proposed location to nearest drilling, completed or applied for on the same lease:N/A feet
Proposed depth: 5,800' Rotary or cable tools: Rotary
Mud Logging only while drilling. After: Gamma Ray; Propagation Resistivity; Density, Neutron Porosity, Electron Capture Spectroscopy; Sonic; and Percussion Planned logging tools: sidewall cores will be completed by wireline
Approx date work will start: 09/17/2014 Number of acres in lease(s): 640
Number of wells on lease, including this well, completed in or drilling to this reservoir:
If lease purchased with one or more wells drilled, complete the following information:
Purchased from (name) N/A
Address of above
Status of bond
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) We will pump 8 cu yds of cement from surface down to below surface pipe and shut in the backside of the production casing. This will enable to have a full column of cement from surface to bottom of surface pipe. We propose to then perform a dual completion by swabbing down to 1000' and perforating; flow test the well; set a packer with burst discs to isolate the bottom of zone; perforate and flow test upper zone; kill well; run long string with dual packer; sting into bottom packer; and set upper dual packer; run short string and tie into dual packer; swah well in and test
of Alta Mesa Services, LP Regulatory Coordinator
(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 are true, correct and complete to the best of my knowledge.
Date: 9-16-2014 Signature: 10000 Coude Coude Signature:
ROBERT R
Permit Number: Approval Date: Approved by:
API Number:11-075-20027-0 [PGL-476
NOTICE: Before sending in this form, be sure that you have given all information requested for introductions on back.

AFFIDAVIT

i, Dale Hayes	make	the	following	statement	and
declare this as true to the best of my info	rmation	, kno	wledge, and	d belief.	

In regards to Alta Mesa Services LP's operations in Payette County, Idaho, there are no offset operators to drilling locations for the Kauffman 1-9; ML Investments 2-10; and the ML Investments 1-11.

AMS is currently requesting an amendment to the original drilling permits submitted to Idaho Department of Lands. This amendment will notify the Department of proposed dual completions for each well and therefore, request a waiver of the 15 day comment period for such amendment as required by IDAPA 220.01 when offset operators are present.

Dale Hayes, VP of Operations

Alta Mesa Services, LP

SUBSCRIBED AND SWORN to me on this day September 16, 2014.

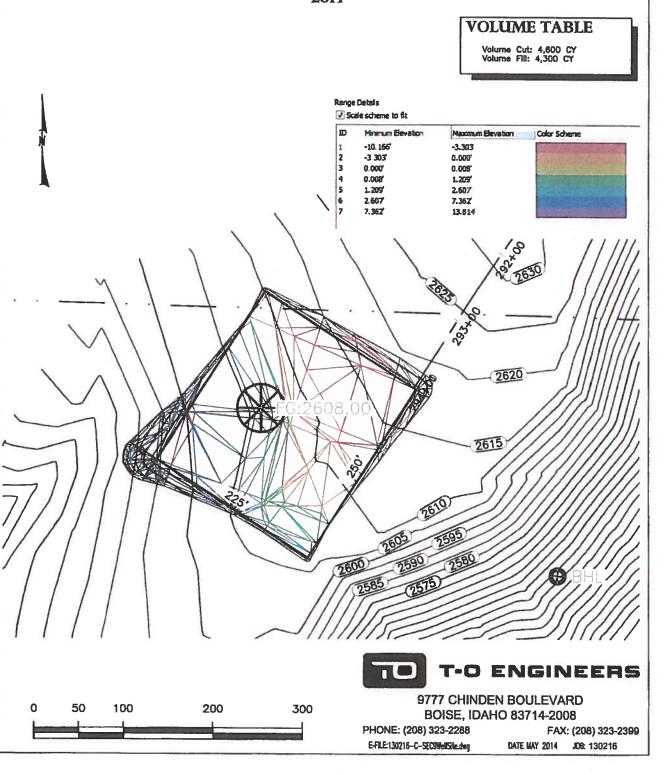
Notary Public
My Commission Expires: 11-5-2014



BOISE, IDAHO 5014 SEB 16 PM 2: 59 DEPT. OF LANDS

MASS GRADING EXHIBIT MAP OF SECTION 9

LOCATED IN A PORTION OF SECTION 9
TOWNSHIP 8 NORTH, RANGE 4 WEST, BOISE MERIDIAN
PAYETTE COUNTY, IDAHO
2014



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Alta Mesa Kaufman 1-9 Payette Co., Idaho

Proposed Surface Squeeze

GL: 2,606'

RKB: 14' (2,620') All depths reference RKB unless otherwise noted. Conductor 13-3/8" 54.5 K-55 LTC @ 134' Redimix cement Squeeze 7" x 9-5/8" annulus with ~35 bbls of cement (annular volume = 31.8 bbls) **Surface Casing** 9-5/8" 40 ppf K-55 LTC @ 1,126'MD Hole Size: 12-1/4" Lead: 134 sxs (90 bbls) type III cement + ad. 3.65 ft3/sk 14.22 gal/sk 10.4 ppg Tail:70 sxs (17 bbls)type III cement + ad. 1.36 ft3/sk 6.42 gal/sk 14.8 ppg Top Job: 70 sxs (15 bbls) Calprem cemet + ad. 1.15 ft3/sk 5 gal/sk 15.8 ppg Top Job 2: 50 sxs (14 bbls) Calprem cement + ad. 1.82 ft3/sx 9.72 gal/sk 13.2 ppg Cemented to surface MW 8.8 ppg WBM FIT = 10 ppg EMW **Production Casing** 7" 26ppf J-55 BTC @ 5,010 Hole Size: 8-3/4" Lead: 367 sxs (119 bbls) Class G cement +. Ad 1.82 ft3/sx 9.72 gal/sk 12.7 ppg Tail: 311 sxs (64bbls) Class G cement + ad. 1.16 ft3/sk 4.9 gal/sk 16 ppg Cement plug from 5,060 - 5,400' MW @ TD 9.8 ppg OBM Did not cement to surface WBM

Tota	Dept	h: 5,687	'TVD	5,755'N	ΙD
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well name & No.: Kautman 1-9	Field: Wildcat
County or Parish: Payette	State: Idaho
Total Depth (MD): 5,755'	(TVD): 5,687'

Alta Mesa Kaufman 1-9 Payette Co., Idaho

Proposed Surface Squeeze

GL: 2,606'

1.16 ft3/sk 4.9 gal/sk 16 ppg

MW @ TD 9.8 ppg OBM

Did not cement to surface

RKB: 14' (2,620') All depths reference RKB unless otherwise noted. Conductor 13-3/8" 54.5 K-55 LTC @ 134' Redimix cement Squeeze 7" x 9-5/8" annulus with ~35 bbls of cement (annular volume = 31.8 bbls) **Surface Casing** 9-5/8" 40 ppf K-55 LTC @ 1,126'MD Hole Size: 12-1/4" Lead: 134 sxs (90 bbls) type III cement + ad. 3.65 ft3/sk 14.22 gal/sk 10.4 ppg Tail:70 sxs (17 bbls)type III cement + ad. 1.36 ft3/sk 6.42 gal/sk 14.8 ppg Top Job: 70 sxs (15 bbls) Calprem cemet + ad. 1.15 ft3/sk 5 gal/sk 15.8 ppg Top Job 2: 50 sxs (14 bbls) Calprem cement + ad. 1.82 ft3/sx 9.72 gal/sk 13.2 ppg Cemented to surface MW 8.8 ppg WBM FIT = 10 ppg EMW **Production Casing** 7" 26ppf J-55 BTC @ 5,010 Hole Size: 8-3/4" Lead: 367 sxs (119 bbls) Class G cement +. Ad 1.82 ft3/sx 9.72 gal/sk 12.7 ppg Tail: 311 sxs (64bbls) Class G cement + ad.

Total Depth: 5,687' TVD/5,755'MD

WBM

Well Name & No.: Kaufman 1-9	Field: Wildcat	
County or Parish: Payette	State: Idaho	
Total Depth (MD): 5,755'	(TVD): 5,687'	

Cement plug from 5,060 - 5,400'

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

James Classen Ken Smith Margaret Chipman Chris Beck Sid Cellan

June 24, 2014

Ronda Louderman Regulatory Coordinator 15021 Katy Frwy., Suite 400 Houston, TX 77094

SUBJECT: Permit to Drill API#11-075-20027, Kauffman 1-9

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

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. All well log information required by IDAPA 20.07.02.091 will be submitted to IDL within 30 days of the logs being run.
- 6. Idaho Department of Lands inspectors shall have 24 hour, unencumbered access for compliance and regulatory purposes.
- 7. All cementing operations shall be in accordance with IDAPA 20.07.02.050. Cement will be returned to surface on all string via the

pump and plug method or other method as approved by the Department.

- 8. This permit does not grant the right for ingress or egress nor does this application grant the right to production from unleased lands.
- 9. No production or drainage must occur until all circumstance in item 8 above has been met or the Commission has issued an order to satisfy item 8.

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

This permit will be administered by AJ Mondor in our Southwest Supervisory Area. He will be inspecting the drilling operation. Please contact him at 208-334-3488 if you have any questions.

Sincerely

ert R. Johnson P.G. Oil & Gas Program Manager

cc: AJ Mondor, Resource Specialist, IDL Southwest Office Chad Hersley, IDWR, PO Box 83720, Boise, Idaho 83720-0098



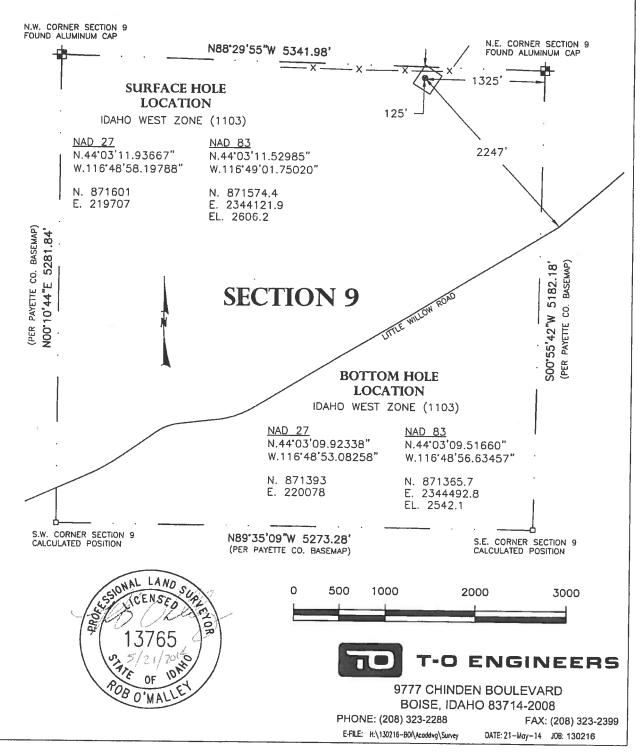
IDAHO OIL AND GAS CONSERVATION COMMISSION

Application For Permit to Drill, Deepen or Plug Back

APPLICATION TO: Drill (\$2,000) 🕻 Deepen (\$500) 🗌 Plug Back (\$50 🔀 📑
NAME OF COMPANY OR OPERATOR: Alta Mesa Services, LP Date: 0523-14
Address: 15021 Katy Frwy., Suite 400
City: Houston State: TX Zip Code: 77094 Telephone: 43-536-0991
Contact Name: Ronda Louderman Email Address: rlouderman@altamesa.net
DESCRIPTION OF WELL AND LEASE
Name of Lease: Kauffman Well Number: 1-9 Elevation (ground) 2,606 feet
Well Location: Section: 9 Township: 8 North Range: 4 West (or block and survey)
(give footage from Section lines): Surface Location – 1325' from East Section line, 190' from North Section
Line, Bottom Hole Location – 397' from North Section line, 931' from East Section line
Field and Reservoir (if wildcat, so state): Willow County: Payette
Distance, in miles, and direction from nearest town or post office: 5.49 miles East
Nearest distance from proposed location to property or lease line: <u>Surface – 50' from West Lease Line</u> ; <u>Bottom – 397' from</u>
North Lease line Distance from proposed location to nearest drilling, completed or applied for on the same lease: N/A
Proposed depth: 5,800' Rotary or cable tools: Rotary
Planned logging tools Mud Logging only while drilling. After: Gamma Ray; Propagation Resistivity; Density, Neutro
Porosity, Electron Capture Spectroscopy; Sonic; and Percussion sidewall cores will be completed by wireline.
Approx date work will start: Number of acres in lease(s): 640
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
Status of bond
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) N/A
CERTIFICATE: I, the undersigned, state that I am the Regulatory Coordinator
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 are true, conject and complete to the best of my
knowledge.
Date: 5-23-14 Signature: Tonda (multiples)
Permit Number: Approval Date: 4-4/14 Approved by: Approved by: 4-075 - 7007 7
API Nulliber. 11-075 2002/
NOTICE: Before sending in this form, be sure that you have given all information requested. See instructions on back. Rev. 05/31/1

LOCATION EXHIBIT MAP OF SECTION 9

LOCATED IN A PORTION OF SECTION 9
TOWNSHIP 8 NORTH, RANGE 4 WEST, BOISE MERIDIAN
PAYETTE COUNTY, IDAHO
2014



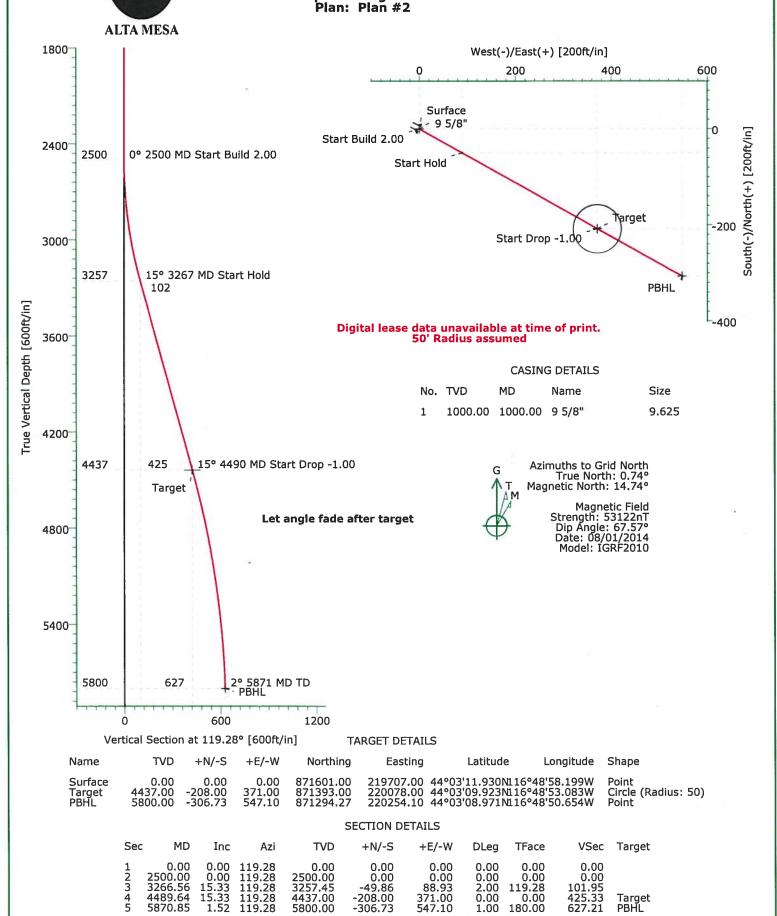
ALTA MESA

Field: Payette County, ID Site: Kauffman 1-9

Well: #1-9

Wellpath: Original Hole





PRECISION DIRECTIONAL SERVICES, INC.

1.00

180.00

713.435.6250

5

Date: 05/22/2014

Plan: Plan #2 (#1-9/Original Hole)

Created By: Lance Rosenblad

5870.85

Precision Directional Services, Inc. Planning Report

Site: Well: Wellpath:	Payette Cou Kauffman 1- #1-9 Original Hol	ınty, ID -9 e			V Se	eate: 05/22/2 co-ordinate(NE) fertical (TVD) I ection (VS) Ref lan:) Reference Reference:	2606'GL+	9, Grid No 12'KB 26		Page:	1
		Plane Coordin	ate System 1	927		Map Zone:			Vestern Z	one		
Geo Datum: Sys Datum:		Clarke 1866) Level				Coordinate S Geomagneti		Well Ce IGRF20				
Site:	Kauffman	1-9										
Site Position From: Position Und Ground Lev	n: Map certainty:	0.00 2606.00			601.00 ft 707.00 ft	Latitude: Longitude: North Refer Grid Conve	ence:	6 48 58	.930 N .199 W Grid 0.74 deg	ı		
Well:	#1-9					Slot Name:						
Well Position Position Un	+E	N/-S 0.00 E/-W 0.00 0.00	ft Eastin		601.00 ft 707.00 ft	Latitude: Longitude:	4- 11(.930 N .199 W			
Wellpath: Current Da Magnetic D Field Streng Vertical Sec	ata: gth:	ole 606'GL+12'KB 08/01/2014 53122 pth From (TV	l 2 nT	Height 26 +N/-S	618.00 ft	Drilled Fron Tie-on Depti Above Syste Declination: Mag Dip An +E/-W ft	h: m Datum:	Mean S 1	0.00 ft ea Level 4.00 deg 7.57 deg			
		0.00		0.00		0.00		119.28				
Plan: Principal:	Plan #2 p2 for date No	um conversio	า			Date Compo Version: Tied-to:	osed:	05/21/2 1 From S				
Plan Section												
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target		
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Survey												
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100f	Tool/Co t	mment	
2500.00 2600.00 2700.00 2800.00 2900.00	0.00 2.00 4.00 6.00 8.00	119.28 119.28 119.28 119.28 119.28	2500.00 2599.98 2699.84 2799.45 2898.70	0.00 -0.85 -3.41 -7.67 -13.63	0.00 1.52 6.09 13.69 24.32	0.00 1.75 6.98 15.69 27.88	0.00 2.00 2.00 2.00 2.00	0.00 2.00 2.00 2.00 2.00	0.00 0.00 0.00 0.00 0.00			
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3900.00	15.33	119.28	3868.34	-131.76	235.01	269.43	0.00	0.00	0.00			

Precision Directional Services, Inc. Planning Report

Company: ALTA MESA Field: Payette County, ID

Page: 2

Site:

Kauffman 1-9 Well: #1-9
Wellpath: Original Hole

Date: 05/22/2014 Time: 11:35:07 Co-ordinate(NE) Reference: Well: #1-9, Grid North Vertical (TVD) Reference: 2606 GL+12 KB 2618.0 Section (VS) Reference: Plan:

Well (0.00N,0.00E,119.28Azi) Plan #2

400.00	MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W	VS ft	DLS deg/100ft	Build deg/100ff	Turn t deg/100ft	Tool/Comment
4100.00 15.33 119.28 4061.23 -157.62 281.14 322.31 0.00 0.00 0.00 4200.00 15.33 119.28 4157.67 -170.55 304.20 348.75 0.00 0.00 0.00 4300.00 15.33 119.28 4254.11 -183.48 327.26 375.19 0.00 0.00 0.00 4400.00 15.33 119.28 4350.55 -196.41 350.33 401.63 0.00 0.00 0.00 4489.64 15.33 119.28 4437.00 -208.00 371.00 425.33 0.00 0.00 0.00 0.00 4500.00 15.23 119.28 4446.99 -209.34 373.38 428.06 1.00 -1.00 0.00 4600.00 14.23 119.28 4543.71 -221.77 395.56 453.48 1.00 -1.00 0.00 4800.00 12.23 119.28 4640.85 -233.37 416.26 477.21 1.00 -1.00 0.00 4800.00 12.23 119.28 4836.30 -254.09											
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	5870.85	1.52	119.28	5800.00	-306.73	547.10	627.21	1.00	-1.00	0.00	PBHL

Targets

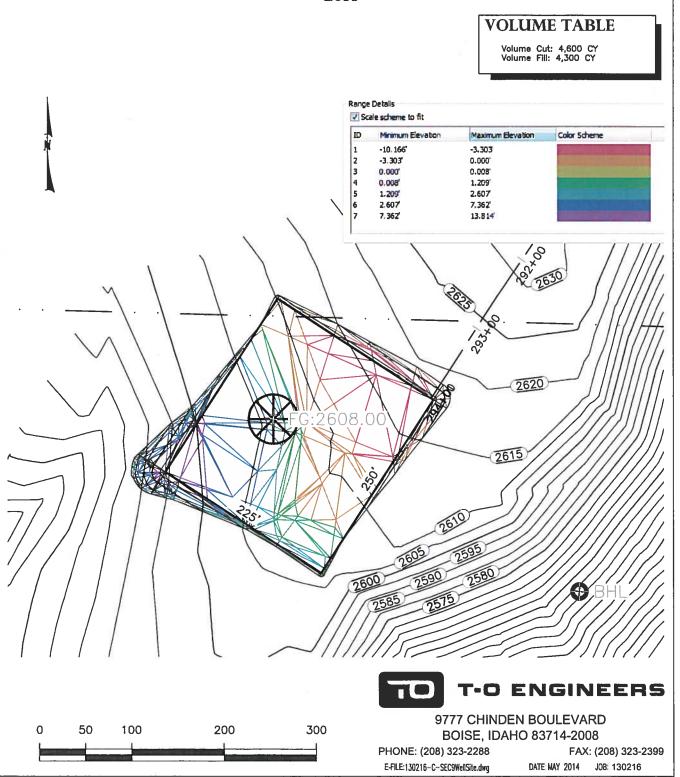
Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft			itude> Sec			ngitud in Se	
Surface			0.00	0.00	0.00	871601.00	219707.00	44	3	11.930 N	116	48	58.19	9 W
Target -Circle (Radi			4437.00	-208.00	371.00	871393.00	220078.00	44	3	9.923 N	116	48	53.08	3 W
-Plan hit targ PBHL -Plan hit targ	•		5800.00	-306.73	547.10	871294.27	220254.10	44	3	8.971 N	116	48	50.65	4 W

Casing Points

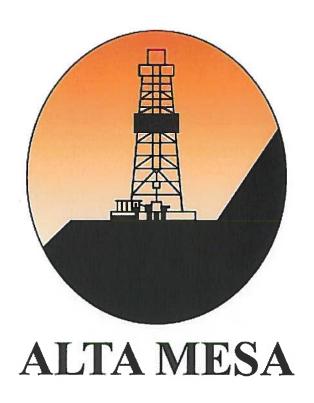
MD ft	TVD ft	Diameter in	Hole Size in	Name	
1000.00	1000.00	9.625	12.250	9 5/8"	

MASS GRADING EXHIBIT MAP OF SECTION 9

LOCATED IN A PORTION OF SECTION 9
TOWNSHIP 8 NORTH, RANGE 4 WEST, BOISE MERIDIAN
PAYETTE COUNTY, IDAHO
2014



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ALTA MESA SERVICES, LP

IDL Permit Supplement
Kaufman 1-9
Payette County, ID
May 22, 2014

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1 Background Information

The objective of this operation is to drill a vertical well to 5,800'TVD/5,871'MD. **Objective:**

AFE #: **TBD**

Well Type: Vertical Well Name: Kaufman 1-9

Field:

Willow

County:

Payette

State: Section: Idaho

Township:

Range:

8N 4W

Mapping Reference:

System:

NAD83 / NAD27

Zone:

UTM11

SPCS: Idaho West Zone 1103 Mag Dec:

14.15° (01-Jul-2013)

Grid Conv.: -0.75113°

Total Corr.: 14.90113°

Coordinates:

Surface Location:

NAD83

Lat.:

N 44° 03' 11.52985"

Long.: SPCS: W 116° 49' 01.75020" 2344121.9 ft. E

871574.4 ft. N

NAD27

SPCS:

219707 ft. E

871601 ft. N

Bottom Hole Location:

NAD83

Lat.:

44° 03' 09.51660"

Long.:

116° 48' 56.63457"

SPCS:

2344492.8 ft. E

871365.7 W

NAD27

SPCS:

220078 ft. E

871393 ft. N

Elevation:

GL: 2,606 ft.

RKB: 2,618 ft.

Planned TD:

MD:

5,871.0 ft.

TVD:

5,800.0 ft.

Contractor:

Paul Graham Drilling

Rig:

#7

2 **Geologic Prognosis**

2.1 Prospect

The Kauffman 1-9 Prospect is designed to test the Willow sand, which is found in the Bridge ML Investments 1-10 Well at 4,088' TVD. It is estimated that the target sand will be encountered at +/-4,452' TVD in the Prospect.

2.2 PROPOSED WELL:

The well is to be directionally drilled to a measured depth of 5,800' TVD/ 5,871'MD. The surface location is in Section 9-8N-4W (Payette County, Idaho).

2.3 Estimated Geological Formation Tops

		E	Est. Tops are +/-10'					
		Alta Mesa	Alta Mesa	Alta Mesa				
		Section 9	Section 9	Section 9				
Formation Tops	Comments	Est. MD	Est. TVD	Est. SS				
Hamilton Sand		1,483	1,483	1,135				
CS Marker 1		1,893	1,893	725				
CS Marker 2 (LS Top)		2,638	2,638	-20				
CS Marker 3		3,214	3,207	-589				
MF		1	1	-1,505				
Willow Sand	TARGET	4,506	4,452	-1,834				
Top Basalt		1	. /	1				

3 Site Preparation

3.1 Access Roads

The proposed surface location is to be accessed by an existing farm road that supports heavy truck traffic, approximately 1 mile of improved road over an existing farm path, and 120' of new roadway.

3.2 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 cut and fill slopes are designed with a minimum 2:1 grade to minimize runoff erosion and ensure mechanical stability. See attached engineering drawings.

3.3 Cellars

An 8' deep round cellar box will be installed after the conductor is installed per the relevant section below.

3.4 Pit System

A closed-loop circulating system will be used for this well from spud. Zero discharge practices will be implemented, and all cuttings and waste fluid will be solidified and disposed of at an approved facility. A third party oilfield waste management contractor will provide waste management and tracking services.

3.5 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 and Cementing Program

Well Interval	Bit Size	Casing Size, Grade and Weight	Casing Setting Depth	Top of Cement	Cement Type and Volume
Conductor	17-1/2"	13-3/8" 54.5 ppf K-55 LTC	120'	Surface	Class "A" ~140 sxs 100% excess
Surface	12-1/4"	9-5/8" 40 ppf K-55 LTC	1,000'	Surface	Lead: 100 sxs TCI Beaded Lite @ 10.4 ppg, 100% excess Tail: 50 sxs Class "H" @ 14.8 ppg
Production	8-3/4"	5-1/2" 17 ppf K-55 LTC	5,500'	Surface	Lead: 500 sxs TCI Lite @ 12.7 ppg Tail: 200 sxs Gas Seal @ 16.0 ppg

TCI Beaded Lite: An engineered light weight slurry with excellent compressive strength development the slurry exhibits low fluid loss, thixotropic behavior, and has zero free water.

TCI-Lite: A light weight gel extended slurry that develops excellent compressive strength within 24 hours.

Gas-Seal: A premium production casing slurry that has a gas migration control additive for providing an exceptional cement bond to formation and casing. The slurry also contains clay control with low fluid loss for added gas migration inhibition and slurry stability.

4.2 Proposed Wellbore Schematic

Alta Mesa Kaufman 1-9 Payette Co., Idaho

Proposed Wellbore Schematic



Well Name & No.: Kaufman 1-9	Field: Wildcat	
County or Parish: Payette	State: Idaho	
Total Depth (MD): 5,871'	(TVD): 5,800'	350°17'10'

4.3 Blow-Out Preventers

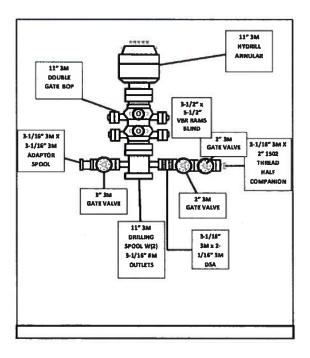
4.3.1 **BOP Hardware Configuration**

BOP Stack configuration includes an annular preventer and double ram preventers. The top most ram preventer will be fitted with variable ram blocks, the lower ram preventer will be fitted with blind ram blocks. A full-opening safety valve, inside BOP, and functioning wrench – specific to the pipe in use and only those specific to the pipe in use – are to be kept on the rig floor with easy access at all times.

4.3.2 **BOP Testing**

Test annular, rams, choke manifold, FOSV, and IBOP when BOP is first nippled up on casing head. Low-pressure test to 250psi and high-pressure test to 3,000psi (100% of 3M wellhead), except for annular. Test annular preventer to 2,100psi (70% of 3,000psi rating). Test the kelly hose and standpipe back to pump isolation valves to 200 psi above pop off setting or minimum of 3,000 psi. All tests must hold for five minutes. Retest specific component each time a seal is broken. Work BOP's and flush choke lines each trip. Tighten BOP and wellhead bolts every 3 days. Non-ported float valves to be used in BHA after surface casing set.

During drilling and completion operations, the ram-type blow-out preventer shall be function tested by closing on the drill pipe once every seven (7) days. Independently powered accumulators or accumulators and pumps shall maintain a pressure capacity reserve at all times to provide for repeated operation of hydraulic preventers. All tests may be conducted using a test plug. Tests shall be recorded by charts, if required by the Supervisor.



4.4 13-3/8" Conductor

4.4.1 **Drilling**

The conductor will be installed via auger and grout unless surface conditions dictate driving.

4.4.2 **Casing**

Set Depth (ft.)	Top (RTE)	Size (in)	Weight (#/ft)	Grade	Burst (psi)	Collapse (psi)	Centralizers
120'	GL	13-3/8	54.5	K-55	2,730	1,130	None

4.5 <u>12-1/4" Surface Hole</u>

4.5.1 **Drilling**

4.5.1.1 Directional Objective

The surface hole will be drilled vertically to 1,000' MD/TVD.

4.5.1.2 Mud System

The surface hole will be drilled using fresh water based mud. Additives will be included for inhibition and also to build high-viscosity sweeps as necessary.

Measured Depth, ft.	Mud Density, ppg	Funnel Viscosity, cP	Yield Point, lb/100ft ²	API Fluid Loss, ml	pН	LGS %
120 – 1,000'	8.6	25-36	8-12	N/C	7.0-8.0	4 - 7

4.5.2 **Open Hole Evaluation**

No open-hole evaluation will be conducted in this interval

4.5.3 **Casing**

The surface casing is to be set at a depth that isolates problematic formations and usable water strata.

Set Depth	Top (RTE)	Size	Weight (#/ft)	Grade	Conn	Internal Diameter	A STATE OF THE STA	Collapse	Tension
1,000'	GL	9-5/8"	40.0	K-55	LTC	8.835"	3,950 psi	2,570 psi	561 kips

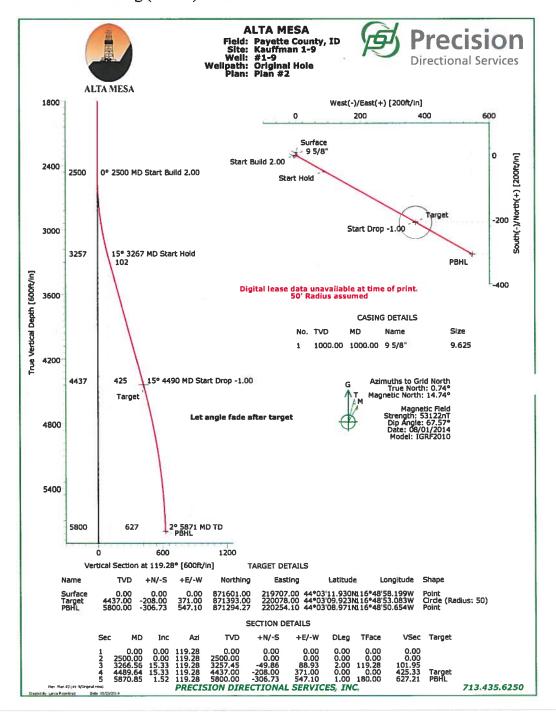
4.6 8-3/4" Production Hole

The 8-3/4" hole will be drilled directionally to \sim 5,800'TVD/5,871'MD. Kickoff point will be \sim 2,500' TVD/MD with a build rate of 2°/100 feet to an angle of 15°. At \sim 4,490'MD the well will be gradually dropped at 1°/100 feet to total depth. Angle at total depth will be \sim 2°.

4.6.1 **Drilling**

4.6.1.1 Directional Objective

The 8-3/4" production hole will be drilled directionally to 5,800' TVD/ 5,871'MD. Surveys will be obtained using a measurement while drilling (MWD) tool.



4.6.1.2 Mud System

The production hole interval will be drilled with an invert emulsion mud system.

Measured	Mud Density,			HTHP Fluid	ES	LGS %
Depth, ft.	ppg	Viscosity, cP	lb/100ft ²	Loss, ml	Aleksan, n., are	
1,000 - 5,871'	9.2 -9.8	36 - 45	6 - 10	<10.0	>600	< 5%

An invert emulsion drilling fluid will be used from below surface casing to total depth. The production casing will be cemented to surface thus, no drilling fluid will be left in the hole. Drill cuttings waste generated will be managed on location by a third party oilfield waste management company who will supervise the solidification, tracking and transportation to an approved waste disposal site of all oilfield waste generated while drilling. A zero-discharge closed loop sysem will be employed.

4.6.2 Logging Program

While Drilling: Mud logging only

Coring: None

Wireline: After reaching TD, and conditioning the hole, wireline evaluation will be conducted as follows:

- Gamma Ray
- Propagation Resistivity
- Density
- Neutron Porosity
- Electron Capture Spectroscopy
- Sonic
- Percussion sidewall cores

4.6.3 **Production Casing**

The production casing string is designed to be run to total depth and withstand the expected wellbore pressures.

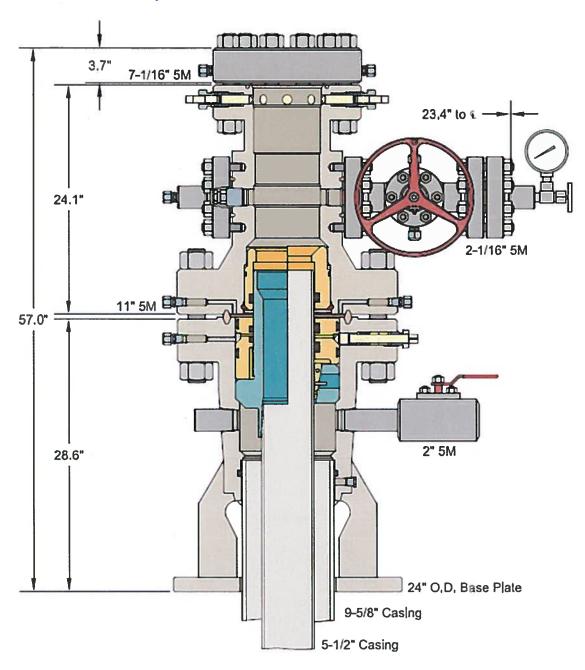
Set Depth ft.			Weight (#/ft)			Internal Diameter		Collapse	Tension
5,871'	GL	5-1/2"	17	K-55	LTC	4.892"	4,910 psi	5,320 psi	272 kips

5 Completion

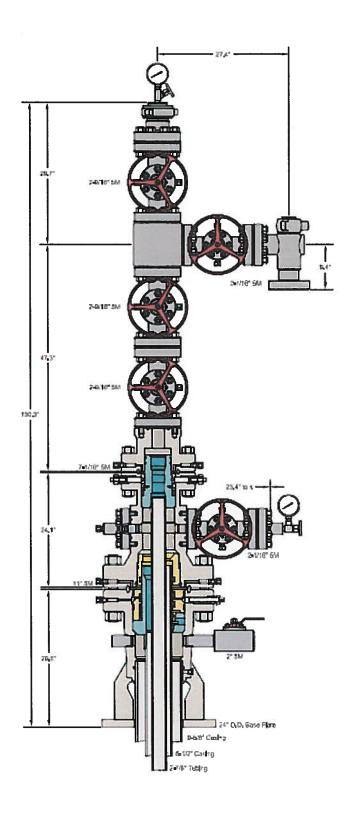
Method of completion will be determined subsequent to review of open-hole log data and cased hole cement bond logs (CBL).

6 Wellhead

6.1 Surface Wellhead System



6.2 Complete Wellhead System with Tree



7 Reclamation

Reclamation will be conducted in accordance with IDAPA 20.07.02.325. 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 20.07.02.325.08, 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. Re-establish slope stability, surface stability, and desired topographic diversity.
 - a. 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.
- 2. 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.
- 3. 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
- 4. 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 20.07.02.325
 - 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
- 5. Reestablish initial visual composition
 - a. Ensure the reclaimed landscape features conform to the prior conditions of the site.



101 MORGAN KEEGAN DRIVE, SUITE A | LITTLE ROCK, AR 72202 P.O. BOX 251618 | LITTLE ROCK, AR 72225-1618 TEL: (501) 603-9000 | FAX: (501) 603-0556 | PPGMRLAW.COM | PLLC

JOHN F. PEISERICH JOHN@PPGMRLAW.COM

July 19, 2013

Mr. Bobby Johnson Idaho Department of Lands Idaho Oil and Gas Conservation Commission 300 N. 6th Street Suite 103 Boise, ID 83702

> RE: Exceptional Location Letter Application Section 9, Township 8 North, Range 4 West Willow Field, Payette County, Idaho

Mr. Johnson,

Please allow this letter to serve as Alta Mesa Services, LP's application for an exceptional location for its well proposed in Section 9, Township 8 North, Range 4 West in the Willow Field located in Payette County, Idaho. The well permit application is being transmitted concurrently for your consideration and Alta Mesa Services, LP ("Applicant") requests that this letter application be attached to the well permit as an additional submittal.

In accordance with IDAPA 20.07.02.330.04, the Applicant submits with this application a plat which provides the following information:

a. The location at which an oil or gas well could be drilled in compliance with Subsections 330.01 or 330.02 or the applicable order; (demonstrated as the nearest potential well location within Section 4) b. The location at which the applicant requests permission to drill; and (demonstrated by the Proposed Well Location)

c. The location at which oil or gas wells have been drilled or could be drilled, in agreement with Subsection 330.01 or 330.02 or the applicable order, directly or diagonally offsetting the proposed exception. (In Section 10, the ML Investments No. 1-10 is indicated in the north-central portion of the section. Also in Section 10, the ML Investments No. 2-10 is indicated in the northeast portion of the section. Each of these locations are well beyond the expected potential drainage zone of the proposed wells. The drainage zone is indicated on the attached plat and potential locations are demonstrated by the 1,660 foot legal location boxes shown within each section.)

It should be noted that AM Idaho, LLC is the only working interest owner in the offset sections and thus would be operator in each of those sections.

The Applicant, Alta Mesa Services, LP, requests the approval of an exceptional location due to surface and reservoir characteristics related to the target formation. The proposed surface hole and bottom hole locations are the most protective of the environment; are the most prospective for oil and/or gas; and are necessary to prevent waste and avoid stranding of resources.

The target formation presents the optimal drilling target at the location selected by the Applicant. Specifically, three dimensional seismic survey data has identified the target, identified for discussion purposes as the "Willow Sand", as time equivalent to the Willow Sand found in the ML Investment #1-10 well. Seismic data of the target indicates i.e. a likely indicator of high-hydrocarbon saturation. The reservoir appears to be with a the boundary between with the vast majority located in Generally, the existing identified reservoirs in Section 10 are fault separated from Section 9 as a significant fault runs of the proposed well in Section 9 and of the existing well location in Section 10.

Geologically, the selected target is believed to be the best potential location within the reservoir with the greatest chance that the target will be prospective for oil and/or gas. Selection of this location will reduce the number of wells necessary to fully develop the prospect by selecting the target with the greatest drainage potential which will prevent economic waste; prevent drilling of additional otherwise unnecessary wells which causes additional surface impacts; and avoid creating areas within the reservoir that are incapable of being drained.

For the reasons stated above, Alta Mesa Services, LP respectfully requests the approval of this exceptional location. If you have further questions, please contact me.

John F. Peiserich

Sincerely.



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JOHN F. PEISERICH JOHN @PPGMRLAW.COM

July 19, 2013

Mr. Bobby Johnson Idaho Department of Lands Idaho Oil and Gas Conservation Commission 300 N. 6th Street, Suite 103 Boise, ID 83702

> RE: Direction Deviation Letter Application Section 9, Township 8 North, Range 4 West Willow Field, Payette County, Idaho

Mr. Johnson,

Please allow this letter to serve as Alta Mesa Services, LP's application for a deviation from vertical for its well proposed in Section 9, Township 8 North, Range 4 West in the Willow Field located in Payette County, Idaho. The well permit application is being transmitted concurrently for your consideration and Alta Mesa Services, LP ("Applicant") requests that this letter application be attached to the well permit as an additional submittal. The well permit application previously submitted includes the information regarding the surface and bottom hole locations along with the planned well path from the directional contractor.

The proposed deviation is requested due to the topographic conditions present at the surface immediately above the bottom hole location. The topography is extremely rugged, composed of a steep hillside that would require extensive excavation that, even with such excavation, may not provide a safe working environment. In additional to ensuring a safe working environment, the Applicant also seeks to minimize the surface impacts by reducing amount of excavating required.

It should be noted that AM Idaho, LLC is the only working interest owner in the offset sections and thus would be operator in each of those sections. As such, no notice to the offset operator is provided.

If you have any questions regarding this application for deviation from vertical, please contact me.

Sincerely,

John Peiserich

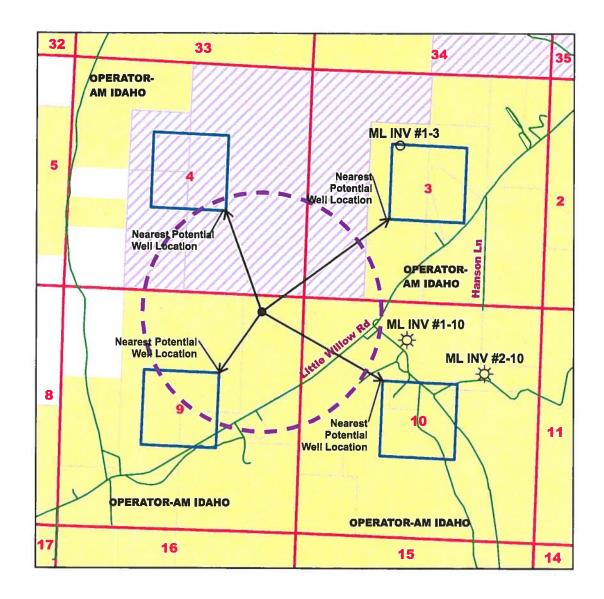
AM IDAHO Kaufmann # 1-9

Time Structure Map of Top Willow Sand (North-South Seismic line in RED)

CONFIDENTIAL

N-S Seismic Line thru proposed Kaufmann #1-9, (North on left)

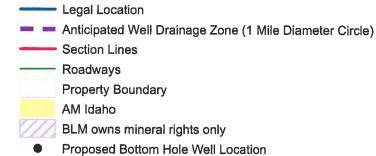
TRADE SECRET PROTECTED
UNDER IDAHO CODE Title 9,
Chapter 3, 9-340D



Kauffman 1-9

Located in Section 9, T8N R4W, BM, Payette County, ID 05/28/14

Legend





1 inch equals 2,000 feet