

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>						<b>1. WELL NAME and NUMBER</b> Pappadakis 15-24-2-1E				
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						<b>3. FIELD OR WILDCAT</b> BLUEBELL				
<b>4. TYPE OF WELL</b> Oil Well <input type="checkbox"/> Coalbed Methane Well: NO <input type="checkbox"/>						<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b>				
<b>6. NAME OF OPERATOR</b> RIG II, LLC						<b>7. OPERATOR PHONE</b> 801 298-9866				
<b>8. ADDRESS OF OPERATOR</b> P.O. Box 6150, Denver, CO, 80206						<b>9. OPERATOR E-MAIL</b> markmcswain@hotmail.com				
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> Fee			<b>11. MINERAL OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>			<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>				
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b> Pappas George N and Cathie M etal						<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b> 801-556-4184				
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b> 166 E Hidden View Dr Lot 4, Sandy, Ut 84070						<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>				
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>			<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			<b>19. SLANT</b> VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>				
<b>20. LOCATION OF WELL</b>		<b>FOOTAGES</b>		<b>QTR-QTR</b>	<b>SECTION</b>	<b>TOWNSHIP</b>	<b>RANGE</b>	<b>MERIDIAN</b>		
LOCATION AT SURFACE		482 FSL 2151 FEL		SWSE	24	2.0 S	1.0 E	U		
Top of Uppermost Producing Zone		700 FSL 2000 FEL		SWSE	24	2.0 S	1.0 E	U		
At Total Depth		700 FSL 2000 FEL		SWSE	24	2.0 S	1.0 E	U		
<b>21. COUNTY</b> UINTAH			<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 482			<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 40				
<b>27. ELEVATION - GROUND LEVEL</b> 5038			<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 2490			<b>26. PROPOSED DEPTH</b> MD: 10003 TVD: 10000				
<b>28. BOND NUMBER</b> LPM9124567			<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> 43-12345							
<b>Hole, Casing, and Cement Information</b>										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
COND	24	16	0 - 80	48.0	H-40 ST&C	0.0	Class G	137	1.17	15.8
SURF	12.25	9.625	0 - 1500	36.0	J-55 ST&C	8.3	Class G	654	1.15	15.8
							Class G	335	1.17	15.8
PROD	7.875	5.5	0 - 10003	17.0	P-110 Other	9.2	Halliburton Premium , Type Unknown	245	3.1	11.0
							Halliburton Premium , Type Unknown	1309	2.1	13.0
<b>ATTACHMENTS</b>										
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>										
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input checked="" type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
<b>NAME</b> Don Hamilton				<b>TITLE</b> Permitting Agent				<b>PHONE</b> 435 650-3866		
<b>SIGNATURE</b>				<b>DATE</b> 10/07/2014				<b>EMAIL</b> starpoint@etv.net		
<b>API NUMBER ASSIGNED</b> 43047547950000				<b>APPROVAL</b>   Permit Manager						

**Rig II, LLC**  
**Pappadakis 15-24-2-1E**  
**SWSE, Section 24 T2S, R1E, U.S.B.&M.**  
**Uintah County, UT**

**Drilling Program**

1. <b>Formation Tops</b>	MD	TVD
Duchesne River /Uint	Surface	Surface
Upper Green River	5,456'	5,454'
MGMK Marker	7,648'	7,645'
Lower Green River	7,714'	7,711'
Wasatch	9,623'	9,619'
TD	10,003'	10,000'

2. **Depth to Oil, Gas, Water, or Minerals**

Upper Green River	5,456' - 5,454'	(Oil)
Lower Green River	7,714' - 7,711'	(Oil)
Wasatch	9,623' - 9,619'	(Oil)

Fresh water may be encountered in the Duchesne Formation, but is not expected below about 300'.

3. **Pressure Control**

<u>Section</u>	<u>BOP Description</u>
Surface	12-1/4" diverter

Interm/Prod The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc for a 5M system.

A 5M BOP system will consist of 2 ram preventers (double or two singles) and an annular preventer (see attached diagram). A choke manifold rated to at least 5,000 psi will be used.

4. **Casing**

Description	Interval (MD)		Weight (ppf)	Grade	Coup	Pore Press @ Shoe	MW @ Shoe	Frac Grad @ Shoe	Safety Factors		
	Top	Bottom							Burst	Collapse	Tension
Conductor 16	0'	80'	48	H-40	STC	--	--	--	1,730	770	322,000
Surface 9 5/8	0'	1,500'	36	J-55	STC	8.33	8.33	12	3,520	2,020	394,000
Production 5 1/2	0'	10,000'	17	P-110	LTC	9	9.2	11	7,740	6,280	348,000
									2.10	1.66	2.05

**Assumptions:**

Surface casing MASP = (frac gradient + 1.0 ppg) - (gas gradient)

Intermediate casing MASP = (reservoir pressure) - (gas gradient)

Production casing MASP = (reservoir pressure) - (gas gradient)

All collapse calculations assume fully evacuated casing with a gas gradient

All tension calculations assume air weight of casing

Gas gradient = 0.1 psi/ft

All casing shall be new.

All casing strings shall have a minimum of 1 centralizer on each of the bottom 3 joints.

**5. Cement**

Job	Hole Size	Fill	Slurry Description	ft <sup>3</sup>	OH excess	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
				sacks			
Conductor	24	80'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	161	15%	15.8	1.17
				137			
Surface Lead	12 1/4	1,200'	Class G w/ 2% KCl + 0.25 lbs/sk Flocele	752	100%	15.8	1.15
				654			
Surface Tail	12 1/4	300'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	392	100%	15.8	1.17
				335			
Production Lead	7 7/8	3,500'	Econocem-1# granulite+.25# polyflake	758	25%	11.0	3.10
				245			
Production Tail	7 7/8	6,500'	Econocem- .95%bw HR-5+.125# polyflake	2748	25%	13.0	2.10
				1309			

The surface casing will be cemented to surface. In the event that cement does not reach surface during the primary cement job, a remedial job will be performed.

Actual cement volumes for the production casing string will be calculated from an open hole caliper log, plus 25% excess.

**6. Type and Characteristics of Proposed Circulating Medium**

<u>Interval</u>	<u>Description</u>
Surface - 1,500'	An air and/or fresh water system will be utilized.
1,500' - TD	A water based mud system will be utilized. Hole stability may be improved with additions of KCl or a similar inhibitive substance. In order to control formation pressure the system will be weighted with additions of bentonite, and if conditions warrant, with barite. Anticipated maximum mud weight is 9.2 ppg.

**7. Logging, Coring, and Testing**

Logging: A dual induction, gamma ray, and caliper log will be run from TD to the base of the surface casing. A compensated neutron/formation density log will be run from TD to the top of the Garden Gulch formation. A cement bond log will be run from

PBTD to the cement top behind the production casing.

Cores: As deemed necessary.

DST: There are no DST's planned for this well.

## 8. Anticipated Abnormal Pressure or Temperature

Maximum anticipated bottomhole pressure will be approximately equal to total depth (feet) multiplied by 0.47 psi/ft gradient.

$$10,000' \times 0.47 \text{ psi/ft} = 4680 \text{ psi}$$

No abnormal temperature is expected. No H<sub>2</sub>S is expected.

## 9. Other Aspects

This is planned as a vertical well

**Based on prior drilling experience in the area, Rig II, LLC is confident that the 5 1/2" 15.5# production is more than sufficient to avoid any possible mechanical integrity problems relating to collapse or burst conditions.**

Variance Request for FIT Requirements:

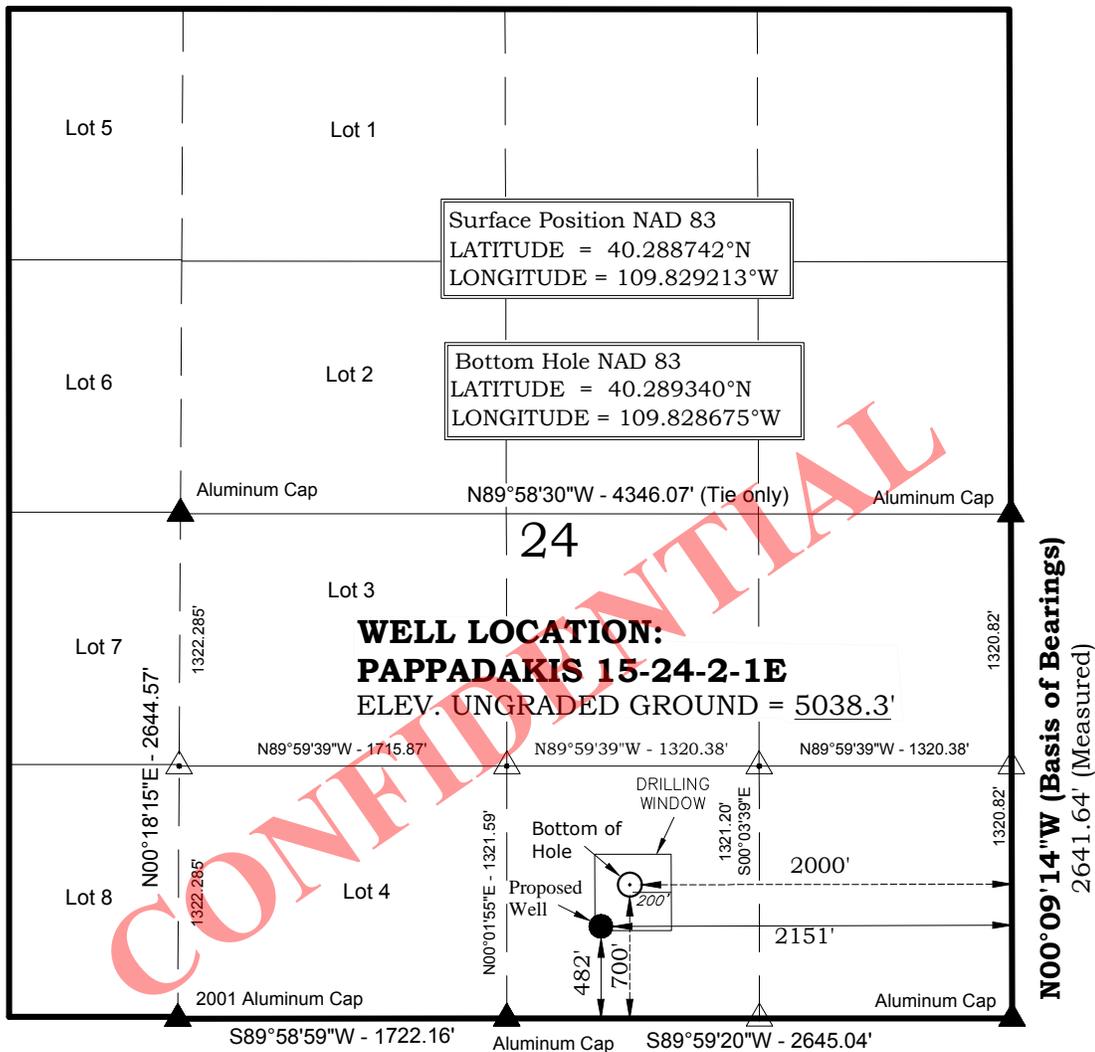
Rig II, LLC respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the Pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Variance Request for Air Drilling Requirements:

Rig II, LLC respectfully requests a variance to Onshore Order #2, III.E.1

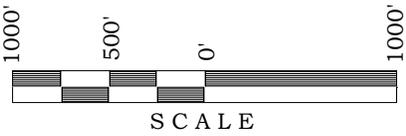
- Dust suppression equipment. Variance granted for water mist system to substitute for the dust suppression equipment.
- Blooie line discharge 100' from the well bore. Variance granted for blooie line discharge to be 75' from the well bore.
- Compressors located in the opposite direction from the blooie line a minimum of 100' from the wellbore. Variance granted for truck/trailer mounted air compressors.
- Straight run blooie line. Variance granted for targeted "T's" at bends.
- Automatic igniter. Variance granted for igniter due to water mist.
- Air drilling operations will be conducted only during drilling of the surface casing hole, there is no history of hydrocarbons being encountered in this hole section in the area where these wells are to be drilled.

# T2S, R1E, U.S.B.&M.



**NOTES:**

- ▲ = Section Corners Located
- △ = Section Corners Located Not Monumented
- 1. Well footages are measured at right angles to the Section Lines.
- 2. Bearings and distances shown on this plat are based upon a local Cartesian Grid which is oriented to Geodetic North at the SE Corner of Section 36, T2S, R1E, U.S.B.&M. the grid having a mean project height of 5,000'. Lineal units used are U.S. Survey Foot. Trimble G.P.S. equipment was used in performance of this survey.
- 3. Latitude and Longitude are NAD 83 (2011) Epoch 2010. Elevations are NAVD 88. Both derived from the Utah Virtual Reference Station Control System (VRS).
- 4. The Bottom of hole bears N34°38'13"E 264.42' from the Surface Position.



**SURVEYOR'S CERTIFICATE**

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

No. 8704293  
 BROCK J. SPAUGH  
 PROFESSIONAL LAND SURVEYOR  
 LICENCE No. 8704293  
 STATE OF UTAH

**RIG II, LLC**

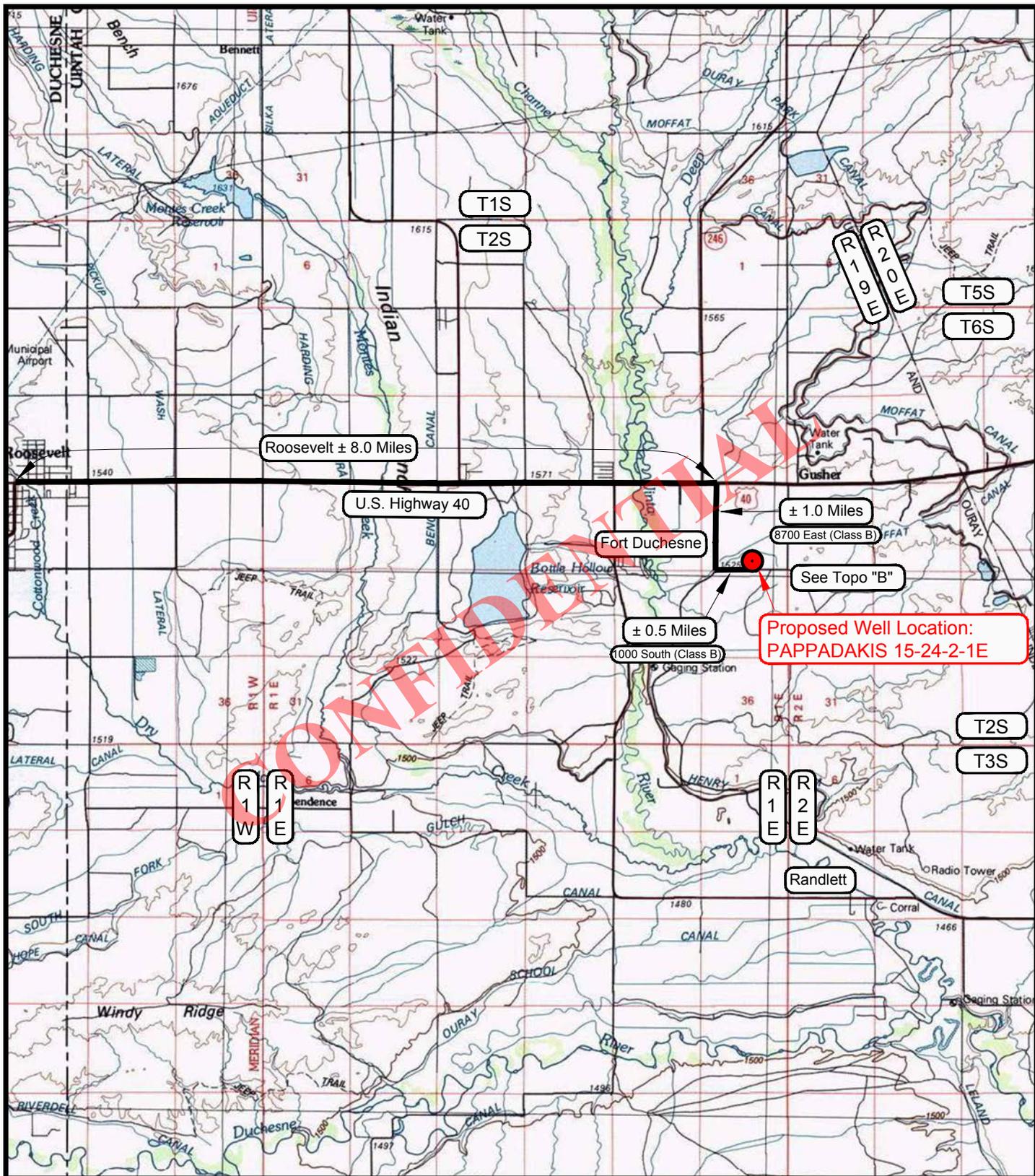
**WELL PLAT**

**PAPPADAKIS 15-24-2-1E**  
**700' FSL, 2000' FEL (Bottom Hole)**  
**SW ¼ SE ¼ OF SECTION 24, T2S, R1E,**  
**U.S.B.&M., UTAH COUNTY, UTAH.**



**TIMBERLINE** (435) 789-1365  
 ENGINEERING & LAND SURVEYING, INC.  
 209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 6-5-14	SURVEYED BY: T.A.	SHEET NO: <b>1</b> OF 12
DATE DRAWN: 6-15-14	DRAWN BY: J.G.C.	
SCALE: 1" = 1000'	Date Last Revised: 09-22-14 J.L.H.	



**LEGEND**

- PROPOSED ACCESS ROAD
- = SUBJECT WELL
- = OTHER WELLS
- = EXISTING ROAD
- = EXISTING ROAD (TO BE IMPROVED)
- B-5460 = COUNTY ROAD CLASS & NUMBER

**RIG II, LLC**

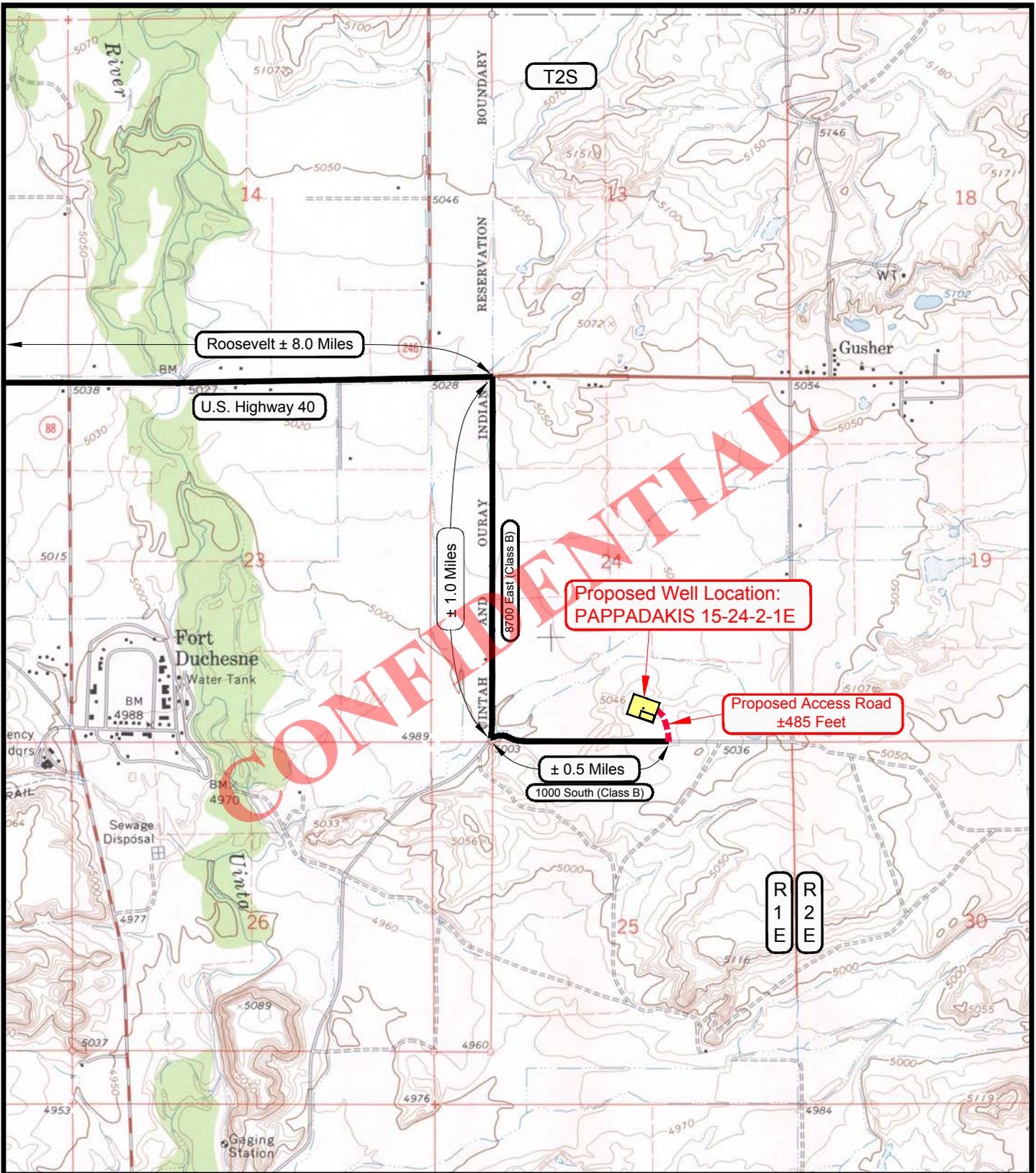
**WELL- PAPPADAKIS 15-24-2-1E**  
**482' FSL & 2151' FEL**  
**LOCATED IN SECTION 24, T2S, R1E,**  
**U.S.&M., UINTAH COUNTY, UTAH.**

TOPOGRAPHIC MAP "A"

DATE SURVEYED: 6-5-14  
 DATE DRAWN: 6-15-14  
 REVISED:

**TIMBERLINE** (435) 789-1365  
 ENGINEERING & LAND SURVEYING, INC.  
 209 NORTH 300 WEST - VERNAL, UTAH 84078

SHEET  
**6**  
 OF 12



Roosevelt ± 8.0 Miles

U.S. Highway 40

T2S

± 1.0 Miles

Proposed Well Location:  
PAPPADAKIS 15-24-2-1E

Proposed Access Road  
±485 Feet

± 0.5 Miles  
1000 South (Class B)

8700 East (Class B)

R1E  
R2E

**RIG II, LLC**

**LEGEND**

- PROPOSED ACCESS ROAD
- = SUBJECT WELL
- = OTHER WELLS
- = EXISTING ROAD
- = EXISTING ROAD (TO BE IMPROVED)
- [Symbol] = PROPOSED WELL
- [Symbol] = COUNTY ROAD CLASS & NUMBER
- = LEASE LINE AND / OR PROPERTY LINE

**WELL - PAPPADAKIS 15-24-2-1E**  
**482' FSL & 2151' FEL**  
**LOCATED IN SECTION 24, T2S, R1E,**  
**U.S.B.&M., UINTAH COUNTY, UTAH.**

TOPOGRAPHIC MAP "B"

DATE SURVEYED: 6-5-14

DATE DRAWN: 6-15-14

SCALE: 1" = 2000'

DRAWN BY: J.G.C.

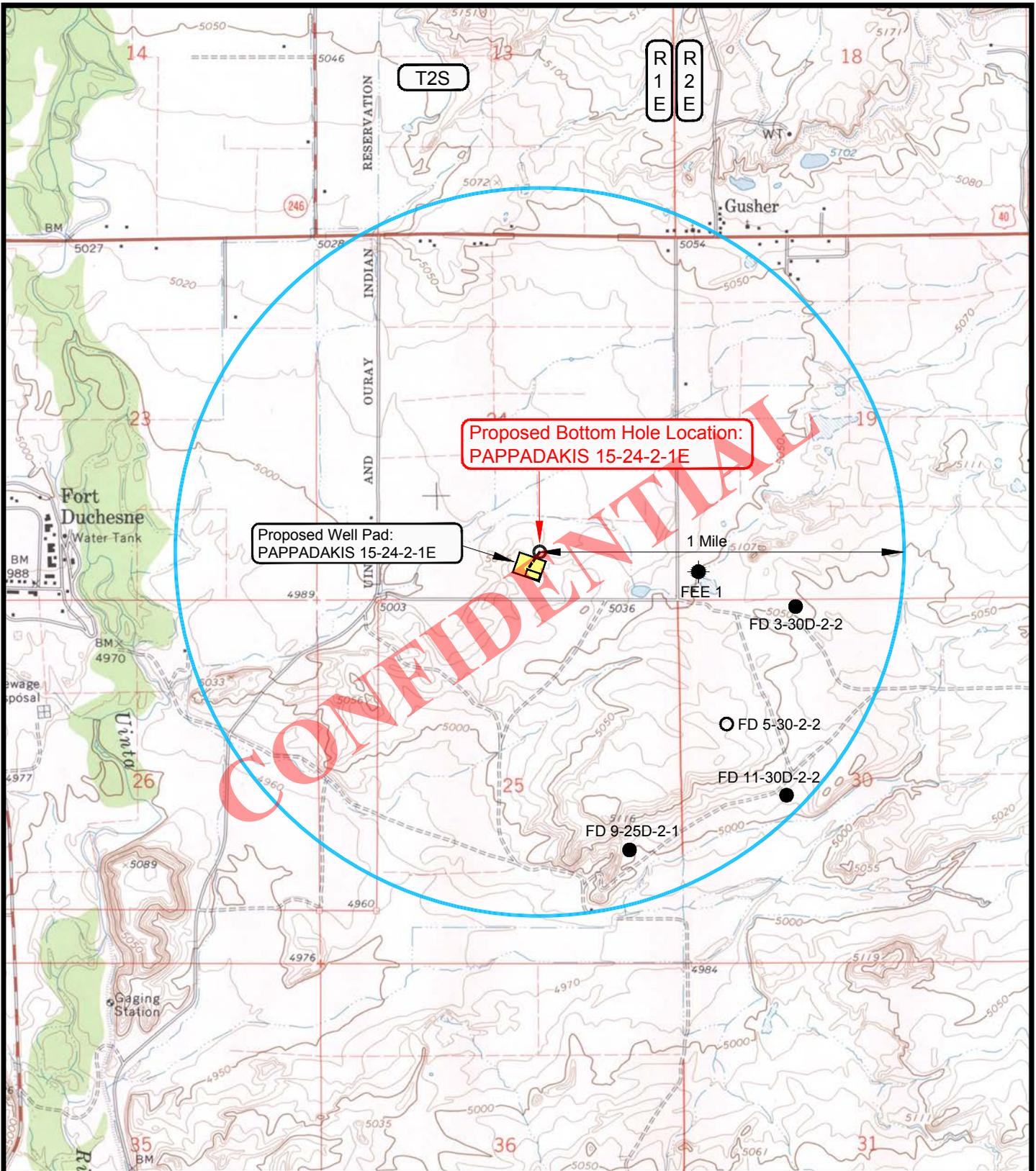
REVISED:

**TIMBERLINE**

(435) 789-1365

ENGINEERING & LAND SURVEYING, INC.  
 209 NORTH 300 WEST - VERNAL, UTAH 84078

SHEET  
**7**  
 OF 12



CONFIDENTIAL

Proposed Well Pad:  
PAPPADAKIS 15-24-2-1E

Proposed Bottom Hole Location:  
PAPPADAKIS 15-24-2-1E

1 Mile

FEE 1

FD 3-30D-2-2

○ FD 5-30-2-2

● FD 11-30D-2-2

● FD 9-25D-2-1

**RIG II, LLC**

**LEGEND**

- = DISPOSAL WELL
- = PRODUCING WELL
- = SHUT IN WELL
- = PROPOSED WELL
- = WATER WELL
- = ABANDONED WELL
- = TEMPORARILY ABANDONED WELL
- ⊙ = ABANDONED LOCATION

**WELL - PAPPADAKIS 15-24-2-1E**  
**700' FSL & 2000' FEL (Bottom Hole)**  
**LOCATED IN SECTION 24, T2S, R1E,**  
**U.S.B.&M., UINTAH COUNTY, UTAH.**

TOPOGRAPHIC MAP "C"

DATE SURVEYED: 6-5-14

DATE DRAWN: 6-15-14

SCALE: 1" = 2000'

DRAWN BY: J.G.C.

REVISED: 09-22-14 J.L.H.

**TIMBERLINE**

(435) 789-1365

ENGINEERING & LAND SURVEYING, INC.  
 209 NORTH 300 WEST - VERNAL, UTAH 84078

SHEET

8

OF 12



Company: Gasco Energy  
 Project: Uintah County, UT NAD83  
 Site: Pappadakis Pad  
 Well: Pappadakis 15-24-2-1E

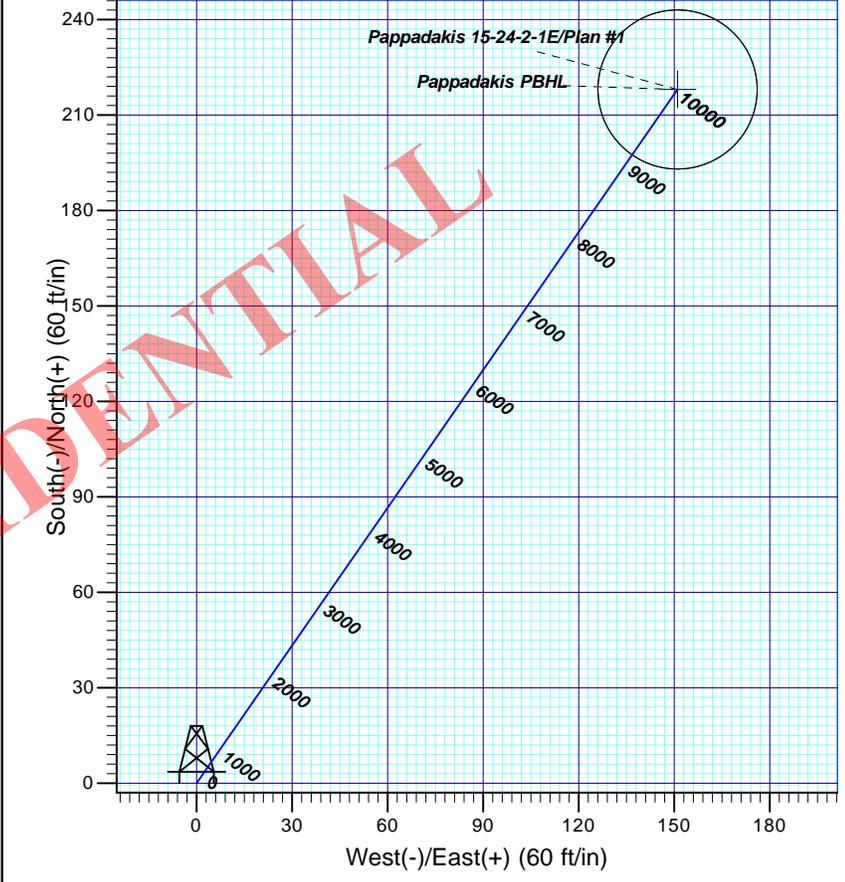
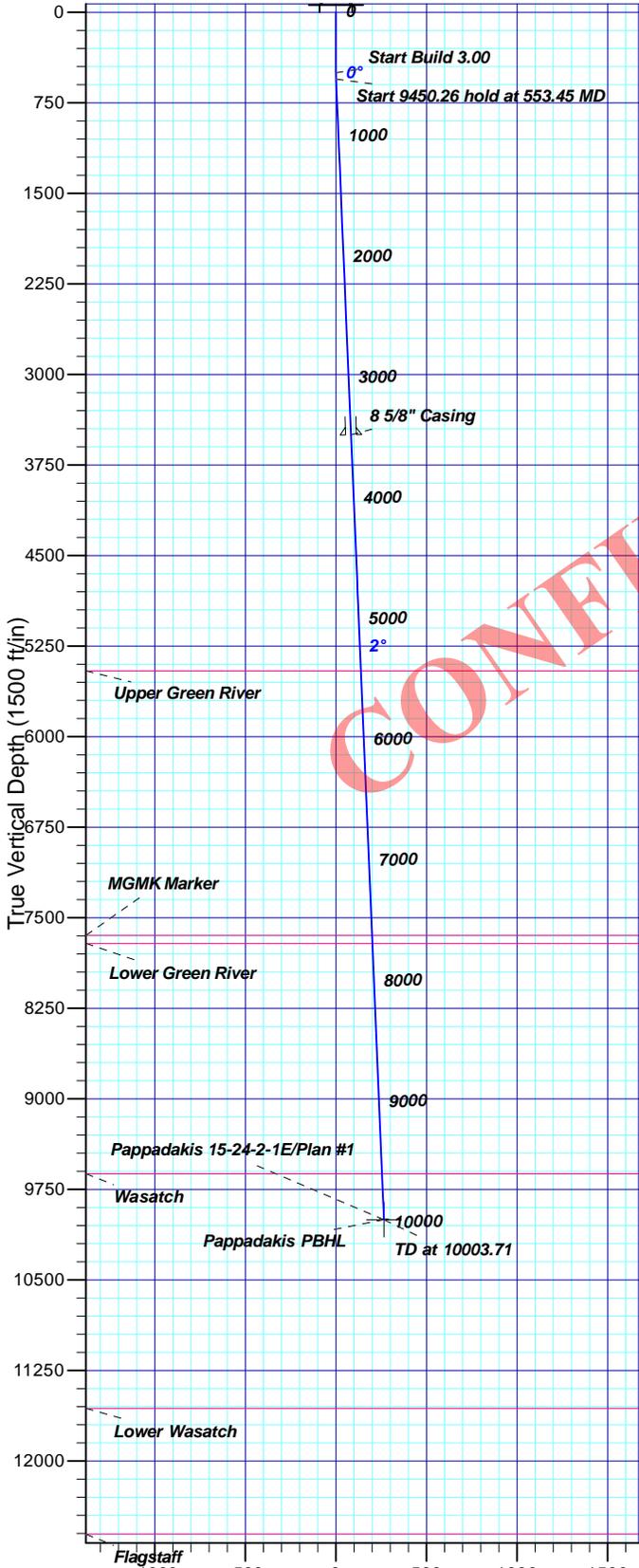
Well Details: Pappadakis 15-24-2-1E

GL 5038' @ 5038.00ft

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	7278255.02	2106472.15	40° 17' 19.471 N	109° 49' 45.167 W	

T M Azimuths to True North  
 Magnetic North: 10.97°

Magnetic Field  
 Strength: 52016.6snT  
 Dip Angle: 65.95°  
 Date: 8/8/2014  
 Model: BGGM2014



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FORMATION TOP DETAILS

TVDPPath	MDPath	Formation
5454.00	5455.93	Upper Green River
7645.00	7647.79	MGMK Marker
7711.00	7713.81	Lower Green River
9619.00	9622.56	Wasatch

Plan: Plan #1

13:23, August 08 2014  
 Created By: Janie Collins

PROJECT DETAILS: Uintah County, UT NAD83

Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: Utah Central Zone  
 System Datum: Mean Sea Level

CASING DETAILS

TVD	MD	Name	Size
3498.84	3500.00	8 5/8" Casing	8.625

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	
3	553.45	1.60	34.71	553.44	0.61	0.43	3.00	34.71	0.75	
4	10003.71	1.60	34.71	10000.00	218.00	151.00	0.00	0.00	265.19	Pappadakis PBHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Pappadakis PBHL	10000.00	218.00	151.00	7278475.80	2106619.00	40° 17' 21.62	109° 49' 43.218 W	Circle (Radius: 25.00)
- plan hits target center								

Vertical Section at 34.71° (1000 ft/in)

# Gasco Energy

Uintah County, UT NAD83

Pappadakis Pad

Pappadakis 15-24-2-1E

OH

Plan: Plan #1

## Standard Planning Report

08 August, 2014

**CONFIDENTIAL**



[www.scientificdrilling.com](http://www.scientificdrilling.com)





<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well Pappadakis 15-24-2-1E
<b>Company:</b>	Gasco Energy	<b>TVD Reference:</b>	GL 5038' @ 5038.00ft
<b>Project:</b>	Uintah County, UT NAD83	<b>MD Reference:</b>	GL 5038' @ 5038.00ft
<b>Site:</b>	Pappadakis Pad	<b>North Reference:</b>	True
<b>Well:</b>	Pappadakis 15-24-2-1E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

<b>Project</b>	Uintah County, UT NAD83		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		

<b>Site</b>	Pappadakis Pad				
<b>Site Position:</b>	<b>Northing:</b>	7,278,255.02 usft	<b>Latitude:</b>	40° 17' 19.471 N	
<b>From:</b> Lat/Long	<b>Easting:</b>	2,106,472.15 usft	<b>Longitude:</b>	109° 49' 45.167 W	
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	1.07 °

<b>Well</b>	Pappadakis 15-24-2-1E					
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	7,278,255.02 usft	<b>Latitude:</b>	40° 17' 19.471 N
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	2,106,472.15 usft	<b>Longitude:</b>	109° 49' 45.167 W
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	0.00 ft	<b>Ground Level:</b>	5,038.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
	BGGM2014	8/8/2014	(°)	(°)	(nT)
			10.97	65.95	52,017

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	34.71

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
553.45	1.60	34.71	553.44	0.61	0.43	3.00	3.00	0.00	34.71	
10,003.71	1.60	34.71	10,000.00	218.00	151.00	0.00	0.00	0.00	0.00	Pappadakis PBHL



<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well Pappadakis 15-24-2-1E
<b>Company:</b>	Gasco Energy	<b>TVD Reference:</b>	GL 5038' @ 5038.00ft
<b>Project:</b>	Uintah County, UT NAD83	<b>MD Reference:</b>	GL 5038' @ 5038.00ft
<b>Site:</b>	Pappadakis Pad	<b>North Reference:</b>	True
<b>Well:</b>	Pappadakis 15-24-2-1E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
553.45	1.60	34.71	553.44	0.61	0.43	0.75	3.00	3.00	0.00	
600.00	1.60	34.71	599.98	1.69	1.17	2.05	0.00	0.00	0.00	
700.00	1.60	34.71	699.94	3.99	2.76	4.85	0.00	0.00	0.00	
800.00	1.60	34.71	799.90	6.29	4.35	7.65	0.00	0.00	0.00	
900.00	1.60	34.71	899.86	8.59	5.95	10.45	0.00	0.00	0.00	
1,000.00	1.60	34.71	999.82	10.89	7.54	13.24	0.00	0.00	0.00	
1,100.00	1.60	34.71	1,099.78	13.19	9.13	16.04	0.00	0.00	0.00	
1,200.00	1.60	34.71	1,199.74	15.49	10.73	18.84	0.00	0.00	0.00	
1,300.00	1.60	34.71	1,299.70	17.79	12.32	21.64	0.00	0.00	0.00	
1,400.00	1.60	34.71	1,399.66	20.09	13.91	24.44	0.00	0.00	0.00	
1,500.00	1.60	34.71	1,499.63	22.39	15.51	27.23	0.00	0.00	0.00	
1,600.00	1.60	34.71	1,599.59	24.69	17.10	30.03	0.00	0.00	0.00	
1,700.00	1.60	34.71	1,699.55	26.99	18.69	32.83	0.00	0.00	0.00	
1,800.00	1.60	34.71	1,799.51	29.29	20.29	35.63	0.00	0.00	0.00	
1,900.00	1.60	34.71	1,899.47	31.59	21.88	38.43	0.00	0.00	0.00	
2,000.00	1.60	34.71	1,999.43	33.89	23.47	41.23	0.00	0.00	0.00	
2,100.00	1.60	34.71	2,099.39	36.19	25.07	44.02	0.00	0.00	0.00	
2,200.00	1.60	34.71	2,199.35	38.49	26.66	46.82	0.00	0.00	0.00	
2,300.00	1.60	34.71	2,299.31	40.79	28.25	49.62	0.00	0.00	0.00	
2,400.00	1.60	34.71	2,399.27	43.09	29.85	52.42	0.00	0.00	0.00	
2,500.01	1.60	34.71	2,499.24	45.39	31.44	55.22	0.00	0.00	0.00	
2,600.01	1.60	34.71	2,599.20	47.69	33.03	58.02	0.00	0.00	0.00	
2,700.01	1.60	34.71	2,699.16	49.99	34.63	60.81	0.00	0.00	0.00	
2,800.01	1.60	34.71	2,799.12	52.29	36.22	63.61	0.00	0.00	0.00	
2,900.01	1.60	34.71	2,899.08	54.59	37.81	66.41	0.00	0.00	0.00	
3,000.01	1.60	34.71	2,999.04	56.89	39.41	69.21	0.00	0.00	0.00	
3,100.01	1.60	34.71	3,099.00	59.19	41.00	72.01	0.00	0.00	0.00	
3,200.01	1.60	34.71	3,198.96	61.49	42.59	74.80	0.00	0.00	0.00	
3,300.01	1.60	34.71	3,298.92	63.79	44.19	77.60	0.00	0.00	0.00	
3,400.01	1.60	34.71	3,398.89	66.09	45.78	80.40	0.00	0.00	0.00	
3,500.00	1.60	34.71	3,498.84	68.39	47.37	83.20	0.00	0.00	0.00	
<b>8 5/8" Casing</b>										
3,500.01	1.60	34.71	3,498.85	68.39	47.37	83.20	0.00	0.00	0.00	
3,600.01	1.60	34.71	3,598.81	70.70	48.97	86.00	0.00	0.00	0.00	
3,700.01	1.60	34.71	3,698.77	73.00	50.56	88.80	0.00	0.00	0.00	
3,800.01	1.60	34.71	3,798.73	75.30	52.15	91.59	0.00	0.00	0.00	
3,900.01	1.60	34.71	3,898.69	77.60	53.75	94.39	0.00	0.00	0.00	
4,000.01	1.60	34.71	3,998.65	79.90	55.34	97.19	0.00	0.00	0.00	
4,100.01	1.60	34.71	4,098.61	82.20	56.93	99.99	0.00	0.00	0.00	
4,200.01	1.60	34.71	4,198.57	84.50	58.53	102.79	0.00	0.00	0.00	
4,300.01	1.60	34.71	4,298.53	86.80	60.12	105.59	0.00	0.00	0.00	
4,400.01	1.60	34.71	4,398.50	89.10	61.71	108.38	0.00	0.00	0.00	
4,500.01	1.60	34.71	4,498.46	91.40	63.31	111.18	0.00	0.00	0.00	
4,600.01	1.60	34.71	4,598.42	93.70	64.90	113.98	0.00	0.00	0.00	
4,700.01	1.60	34.71	4,698.38	96.00	66.49	116.78	0.00	0.00	0.00	
4,800.01	1.60	34.71	4,798.34	98.30	68.09	119.58	0.00	0.00	0.00	
4,900.01	1.60	34.71	4,898.30	100.60	69.68	122.37	0.00	0.00	0.00	
5,000.01	1.60	34.71	4,998.26	102.90	71.27	125.17	0.00	0.00	0.00	



<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well Pappadakis 15-24-2-1E
<b>Company:</b>	Gasco Energy	<b>TVD Reference:</b>	GL 5038' @ 5038.00ft
<b>Project:</b>	Uintah County, UT NAD83	<b>MD Reference:</b>	GL 5038' @ 5038.00ft
<b>Site:</b>	Pappadakis Pad	<b>North Reference:</b>	True
<b>Well:</b>	Pappadakis 15-24-2-1E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,100.01	1.60	34.71	5,098.22	105.20	72.87	127.97	0.00	0.00	0.00	
5,200.01	1.60	34.71	5,198.18	107.50	74.46	130.77	0.00	0.00	0.00	
5,300.01	1.60	34.71	5,298.15	109.80	76.05	133.57	0.00	0.00	0.00	
5,400.01	1.60	34.71	5,398.11	112.10	77.65	136.37	0.00	0.00	0.00	
5,455.93	1.60	34.71	5,454.00	113.39	78.54	137.93	0.00	0.00	0.00	
<b>Upper Green River</b>										
5,500.01	1.60	34.71	5,498.07	114.40	79.24	139.16	0.00	0.00	0.00	
5,600.01	1.60	34.71	5,598.03	116.70	80.83	141.96	0.00	0.00	0.00	
5,700.01	1.60	34.71	5,697.99	119.00	82.43	144.76	0.00	0.00	0.00	
5,800.01	1.60	34.71	5,797.95	121.30	84.02	147.56	0.00	0.00	0.00	
5,900.01	1.60	34.71	5,897.91	123.60	85.61	150.36	0.00	0.00	0.00	
6,000.01	1.60	34.71	5,997.87	125.90	87.21	153.16	0.00	0.00	0.00	
6,100.01	1.60	34.71	6,097.83	128.20	88.80	155.95	0.00	0.00	0.00	
6,200.01	1.60	34.71	6,197.79	130.50	90.39	158.75	0.00	0.00	0.00	
6,300.01	1.60	34.71	6,297.76	132.80	91.99	161.55	0.00	0.00	0.00	
6,400.01	1.60	34.71	6,397.72	135.10	93.58	164.35	0.00	0.00	0.00	
6,500.01	1.60	34.71	6,497.68	137.40	95.17	167.15	0.00	0.00	0.00	
6,600.01	1.60	34.71	6,597.64	139.70	96.77	169.95	0.00	0.00	0.00	
6,700.01	1.60	34.71	6,697.60	142.00	98.36	172.74	0.00	0.00	0.00	
6,800.01	1.60	34.71	6,797.56	144.31	99.95	175.54	0.00	0.00	0.00	
6,900.01	1.60	34.71	6,897.52	146.61	101.55	178.34	0.00	0.00	0.00	
7,000.01	1.60	34.71	6,997.48	148.91	103.14	181.14	0.00	0.00	0.00	
7,100.01	1.60	34.71	7,097.44	151.21	104.73	183.94	0.00	0.00	0.00	
7,200.01	1.60	34.71	7,197.40	153.51	106.33	186.73	0.00	0.00	0.00	
7,300.01	1.60	34.71	7,297.37	155.81	107.92	189.53	0.00	0.00	0.00	
7,400.01	1.60	34.71	7,397.33	158.11	109.51	192.33	0.00	0.00	0.00	
7,500.02	1.60	34.71	7,497.29	160.41	111.11	195.13	0.00	0.00	0.00	
7,600.02	1.60	34.71	7,597.25	162.71	112.70	197.93	0.00	0.00	0.00	
7,647.79	1.60	34.71	7,645.00	163.81	113.46	199.26	0.00	0.00	0.00	
<b>MGMK Marker</b>										
7,700.02	1.60	34.71	7,697.21	165.01	114.29	200.73	0.00	0.00	0.00	
7,713.81	1.60	34.71	7,711.00	165.33	114.51	201.11	0.00	0.00	0.00	
<b>Lower Green River</b>										
7,800.02	1.60	34.71	7,797.17	167.31	115.89	203.52	0.00	0.00	0.00	
7,900.02	1.60	34.71	7,897.13	169.61	117.48	206.32	0.00	0.00	0.00	
8,000.02	1.60	34.71	7,997.09	171.91	119.07	209.12	0.00	0.00	0.00	
8,100.02	1.60	34.71	8,097.05	174.21	120.67	211.92	0.00	0.00	0.00	
8,200.02	1.60	34.71	8,197.02	176.51	122.26	214.72	0.00	0.00	0.00	
8,300.02	1.60	34.71	8,296.98	178.81	123.85	217.52	0.00	0.00	0.00	
8,400.02	1.60	34.71	8,396.94	181.11	125.45	220.31	0.00	0.00	0.00	
8,500.02	1.60	34.71	8,496.90	183.41	127.04	223.11	0.00	0.00	0.00	
8,600.02	1.60	34.71	8,596.86	185.71	128.63	225.91	0.00	0.00	0.00	
8,700.02	1.60	34.71	8,696.82	188.01	130.23	228.71	0.00	0.00	0.00	
8,800.02	1.60	34.71	8,796.78	190.31	131.82	231.51	0.00	0.00	0.00	
8,900.02	1.60	34.71	8,896.74	192.61	133.41	234.30	0.00	0.00	0.00	
9,000.02	1.60	34.71	8,996.70	194.91	135.01	237.10	0.00	0.00	0.00	
9,100.02	1.60	34.71	9,096.66	197.21	136.60	239.90	0.00	0.00	0.00	
9,200.02	1.60	34.71	9,196.63	199.51	138.19	242.70	0.00	0.00	0.00	
9,300.02	1.60	34.71	9,296.59	201.81	139.79	245.50	0.00	0.00	0.00	
9,400.02	1.60	34.71	9,396.55	204.11	141.38	248.30	0.00	0.00	0.00	
9,500.02	1.60	34.71	9,496.51	206.41	142.97	251.09	0.00	0.00	0.00	
9,600.02	1.60	34.71	9,596.47	208.71	144.57	253.89	0.00	0.00	0.00	
9,622.56	1.60	34.71	9,619.00	209.23	144.93	254.52	0.00	0.00	0.00	



<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well Pappadakis 15-24-2-1E
<b>Company:</b>	Gasco Energy	<b>TVD Reference:</b>	GL 5038' @ 5038.00ft
<b>Project:</b>	Uintah County, UT NAD83	<b>MD Reference:</b>	GL 5038' @ 5038.00ft
<b>Site:</b>	Pappadakis Pad	<b>North Reference:</b>	True
<b>Well:</b>	Pappadakis 15-24-2-1E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
<b>Wasatch</b>									
9,700.02	1.60	34.71	9,696.43	211.01	146.16	256.69	0.00	0.00	0.00
9,800.02	1.60	34.71	9,796.39	213.31	147.75	259.49	0.00	0.00	0.00
9,900.02	1.60	34.71	9,896.35	215.61	149.35	262.29	0.00	0.00	0.00
10,000.02	1.60	34.71	9,996.31	217.92	150.94	265.09	0.00	0.00	0.00
10,003.71	1.60	34.71	10,000.00	218.00	151.00	265.19	0.00	0.00	0.00
<b>Pappadakis PBHL</b>									

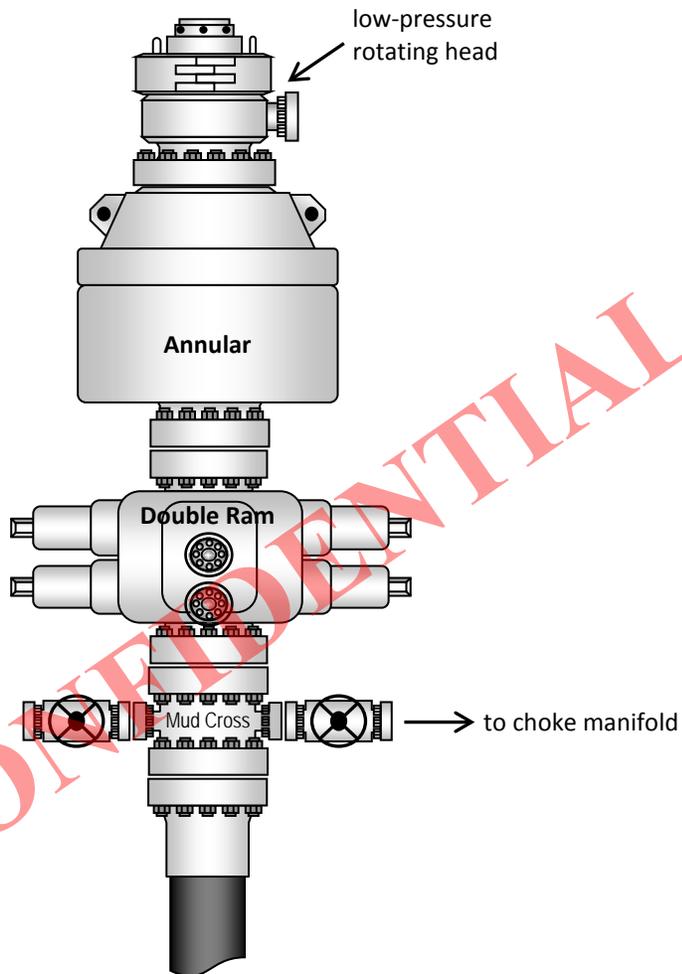
Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Pappadakis PBHL	0.00	0.00	10,000.00	218.00	151.00	7,278,475.81	2,106,619.05	40° 17' 21.626 N	109° 49' 43.218 W
- hit/miss target									
- Shape									
- plan hits target center									
- Circle (radius 25.00)									

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
3,500.00	3,498.84	8 5/8" Casing	8.625	111.000

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,455.93	5,454.00	Upper Green River		0.00	
7,647.79	7,645.00	MGMK Marker		0.00	
7,713.81	7,711.00	Lower Green River		0.00	
9,622.56	9,619.00	Wasatch		0.00	



### Typical 5M BOP stack configuration



October 30, 2014

Mrs. Diana Mason  
State of Utah  
Division of Oil Gas and Mining  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Request for Exception to Spacing – Rig II, LLC

**Pappadakis 15-24-2-1E**

*Surface Location: 482' FSL & 2151' FEL, SW/4 SE/4,*

*Target Location: 700' FSL & 2000' FEL, SW/4 SE/4,*

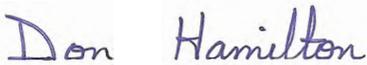
*Section 24, T2S, R1E, USB&M, Uintah County, Utah*

Dear Diana:

Rig II, LLC respectfully submits this request for exception to spacing (Cause No. 139-42) based on topography since the well is located less than 660 feet to the spacing/drilling unit boundary. Rig II, LLC is the only owner and operator within 660 feet of the surface and target location as well as all points along the intended well bore path. Rig II, LLC will be designated Operator for Section 24, T2S, R1E, USB&M pursuant to all Operating Agreements covering the 640 acre spacing / drilling unit.

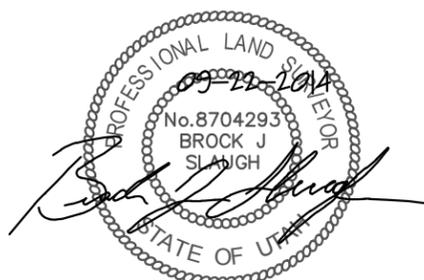
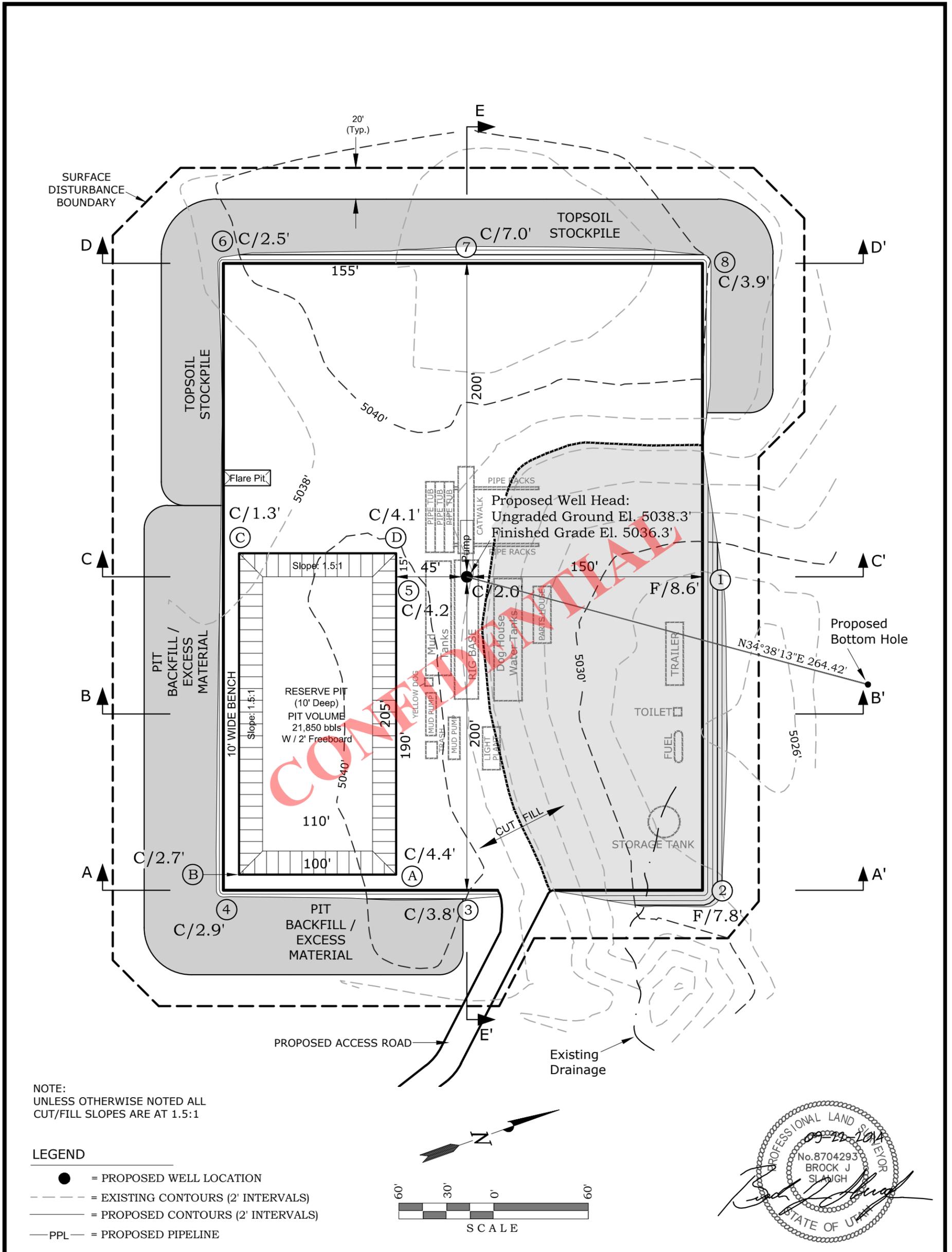
Thank you very much for your timely consideration of this application. Please feel free to contact myself at 435-650-3866 or Todd Kalstrom with Rig II, LLC at 720-645-2623 or [todd@kastomep.com](mailto:todd@kastomep.com) should you have any questions or need additional information.

Sincerely,

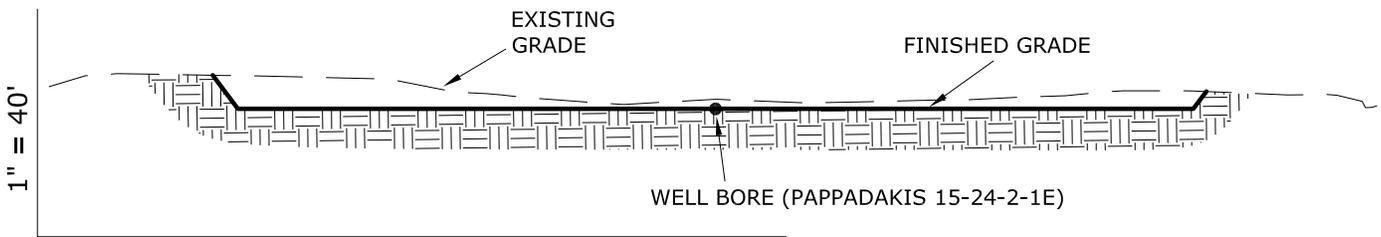


Don Hamilton – Permitting Agent

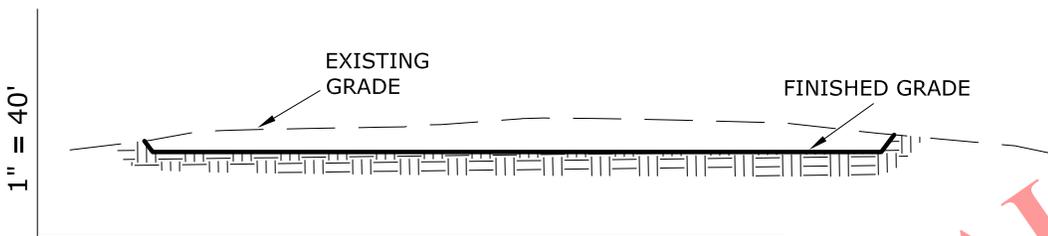
cc: Todd Kalstrom, Rig II, LLC



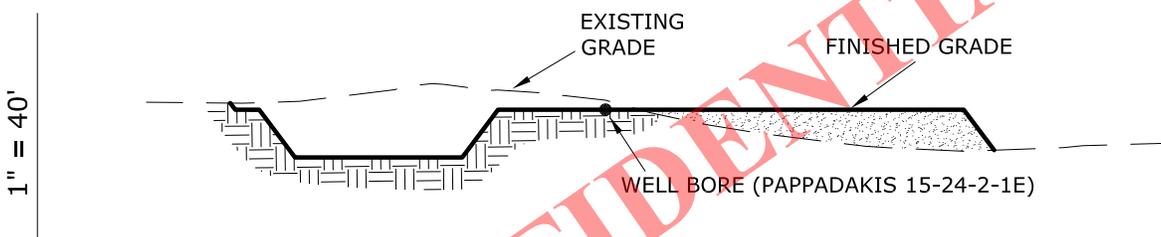
<b>RIG II, LLC</b>  <b>WELL PAD - LOCATION LAYOUT</b>  <b>PAPPADAKIS 15-24-2-1E</b> <b>482' FSL &amp; 2151' FEL</b> <b>LOCATED IN SECTION 24, T2S, R1E,</b> <b>U.S.B.&amp;M., UINAH COUNTY, UTAH.</b>	PAD FOOTPRINT AREA = ±2.801 ACRES PAD DISTURBANCE AREA (Cut/Fill Slopes, Stockpiles) = ±4.021 ACRES AREA WITHIN SURFACE DISTURBANCE BOUNDARY = ±4.960 ACRES	<b>REFERENCE POINTS:</b> 200' NORTHEASTERLY, EL = 5028.8' 235' NORTHEASTERLY, EL = 5029.3' 250' NORTHWESTERLY, EL = 5043.8' 285' NORTHWESTERLY, EL = 5040.1'
	<b>ESTIMATED EARTHWORK QUANTITIES</b> (No shrink or swell adjustments have been used) (Expressed in Cubic Yards)  6" Topsoil Stripping = 2,430 Remaining Location = 15,410 <b>TOTAL CUT = 17,840</b> FILL = 8,320  Pit Backfill = 5,980, Excess Material = 1,110	<b>TIMBERLINE</b> (435) 789-1365 ENGINEERING & LAND SURVEYING, INC. 209 NORTH 300 WEST - VERNAL, UTAH 84078  DATE SURVEYED: 6-5-14 DATE DRAWN: 6-15-14 SCALE: 1" = 60'  SURVEYED BY: T.A. DRAWN BY: J.G.C. Date Last Revised: 09-22-14 J.L.H.



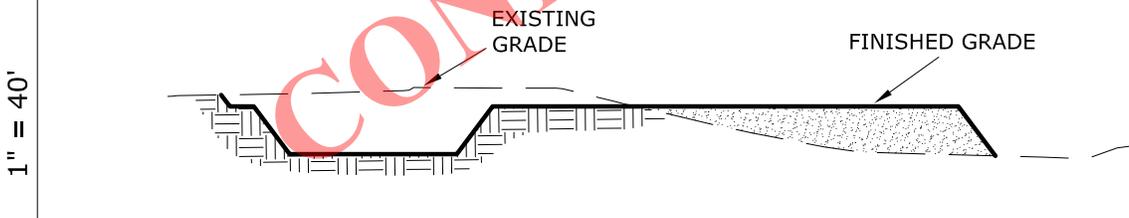
1" = 80' CROSS SECTION E-E'



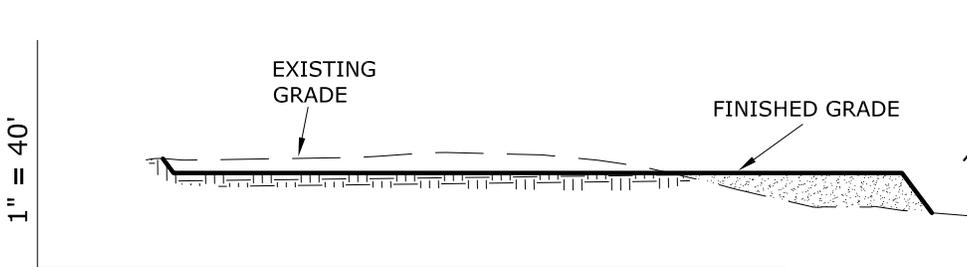
1" = 80' CROSS SECTION D-D'



1" = 80' CROSS SECTION C-C'

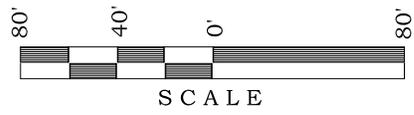
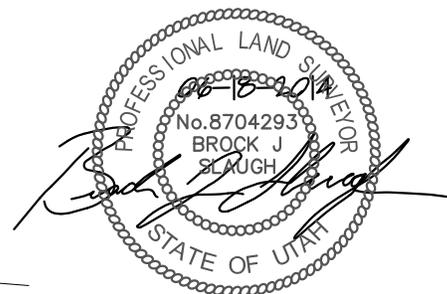


1" = 80' CROSS SECTION B-B'



1" = 80' CROSS SECTION A-A'

CONFIDENTIAL



**RIG II, LLC**

**WELL PAD - CROSS SECTION**

**PAPPADAKIS 15-24-2-1E**  
**482' FSL & 2151' FEL**  
**LOCATED IN SECTION 24, T2S, R1E,**  
**U.S.B.&M., UINTAH COUNTY, UTAH.**

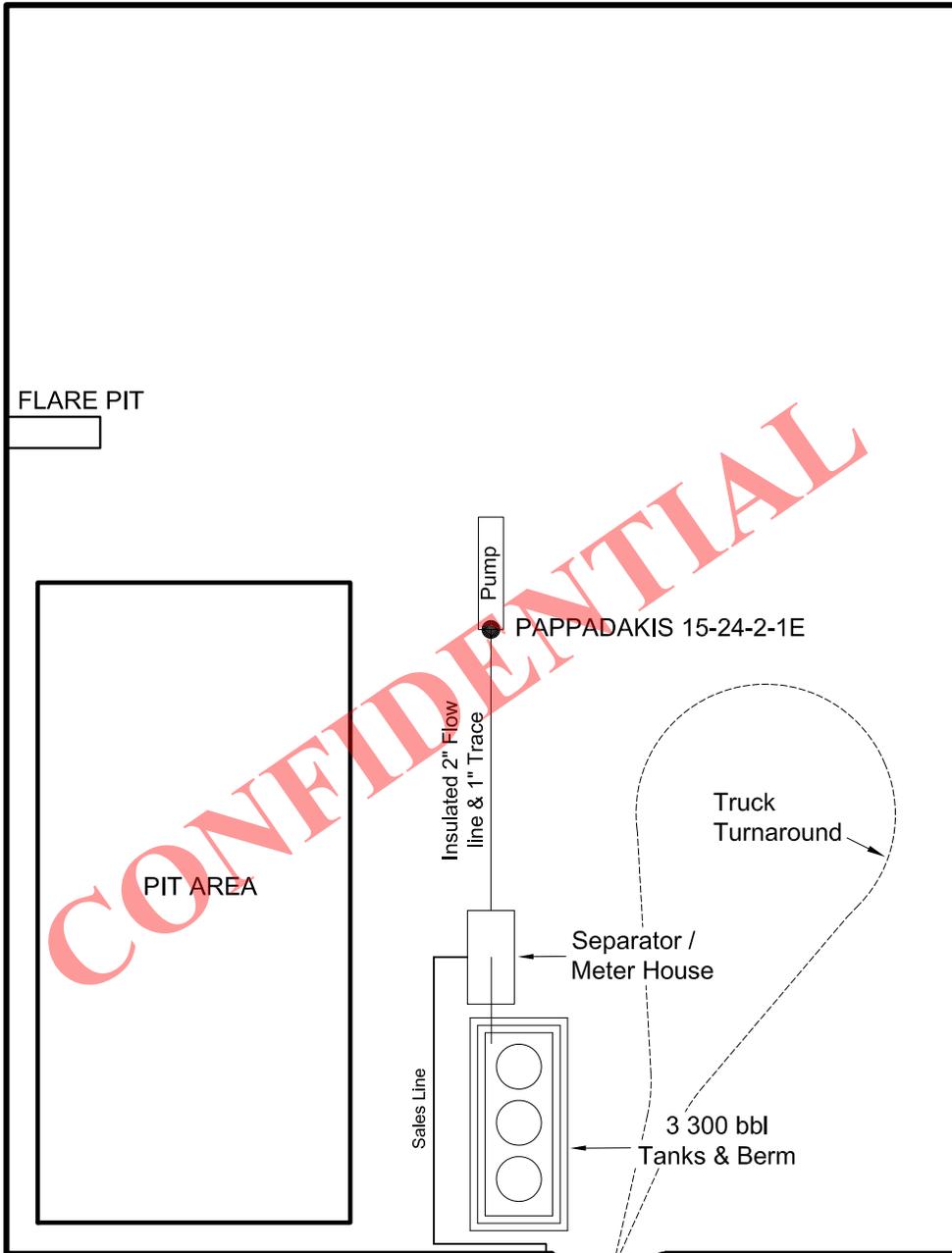
**TIMBERLINE**

(435) 789-1365

ENGINEERING & LAND SURVEYING, INC.  
 209 NORTH 300 WEST - VERNAL, UTAH 84078

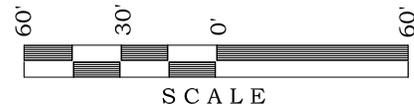
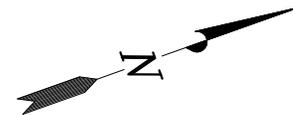
DATE SURVEYED: 6-5-14	SURVEYED BY: T.A.	SHEET NO: <b>3</b> OF 12
DATE DRAWN: 6-15-14	DRAWN BY: J.G.C.	
SCALE: 1" = 80'	Date Last Revised:	

NOTE:  
 PRODUCTION EQUIPMENT LOCATION  
 COULD VARY DUE TO SITE AND OPERATION  
 EFFECTIVENESS.



LEGEND

- = PROPOSED WELL LOCATION
- PPL — = PROPOSED PIPELINE

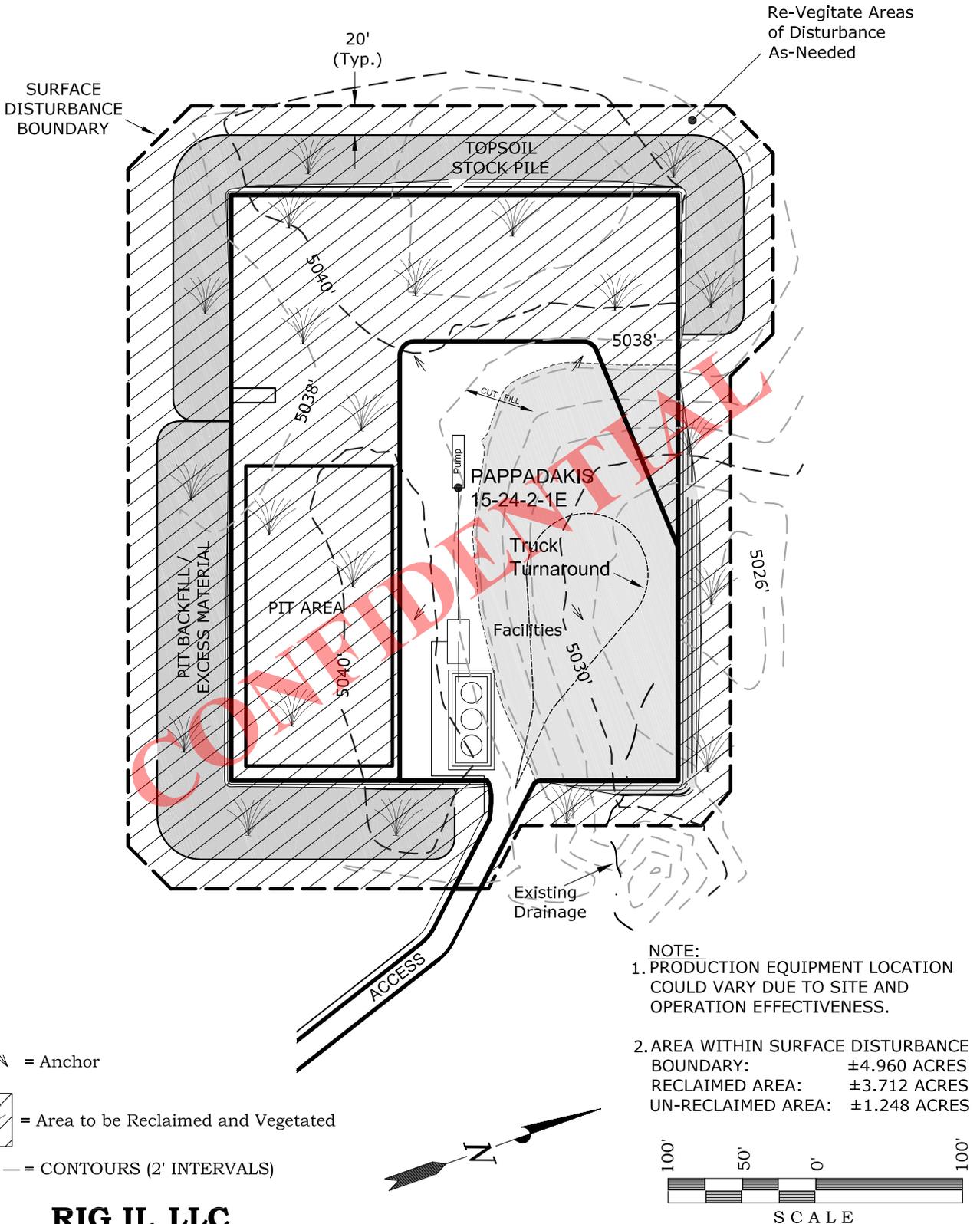


**RIG II, LLC**

**WELL PAD - FACILITY DIAGRAM**

**PAPPADAKIS 15-24-2-1E**  
**482' FSL & 2151' FEL**  
**LOCATED IN SECTION 24, T2S, R1E,**  
**U.S.B.&M., UINTAH COUNTY, UTAH.**

<b>TIMBERLINE</b>		(435) 789-1365
ENGINEERING & LAND SURVEYING, INC. 209 NORTH 300 WEST - VERNAL, UTAH 84078		
DATE SURVEYED: 6-5-14	SURVEYED BY: T.A.	SHEET NO: <b>4</b> OF 12
DATE DRAWN: 6-15-14	DRAWN BY: J.G.C.	
SCALE: 1" = 60'	Date Last Revised:	



**INTERIM RECLAMATION DIAGRAM**

**PAPPADAKIS 15-24-2-1E**  
**482' FSL & 2151' FEL**  
**LOCATED IN SECTION 24, T2S, R1E,**  
**U.S.B.&M., UINTAH COUNTY, UTAH.**

**TIMBERLINE** (435) 789-1365  
 ENGINEERING & LAND SURVEYING, INC.  
 209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 6-5-14	SURVEYED BY: T.A.	SHEET NO: <b>5</b> OF 12
DATE DRAWN: 6-15-14	DRAWN BY: J.G.C.	
SCALE: 1" = 100'	Date Last Revised:	

API Number: 43-047-54795

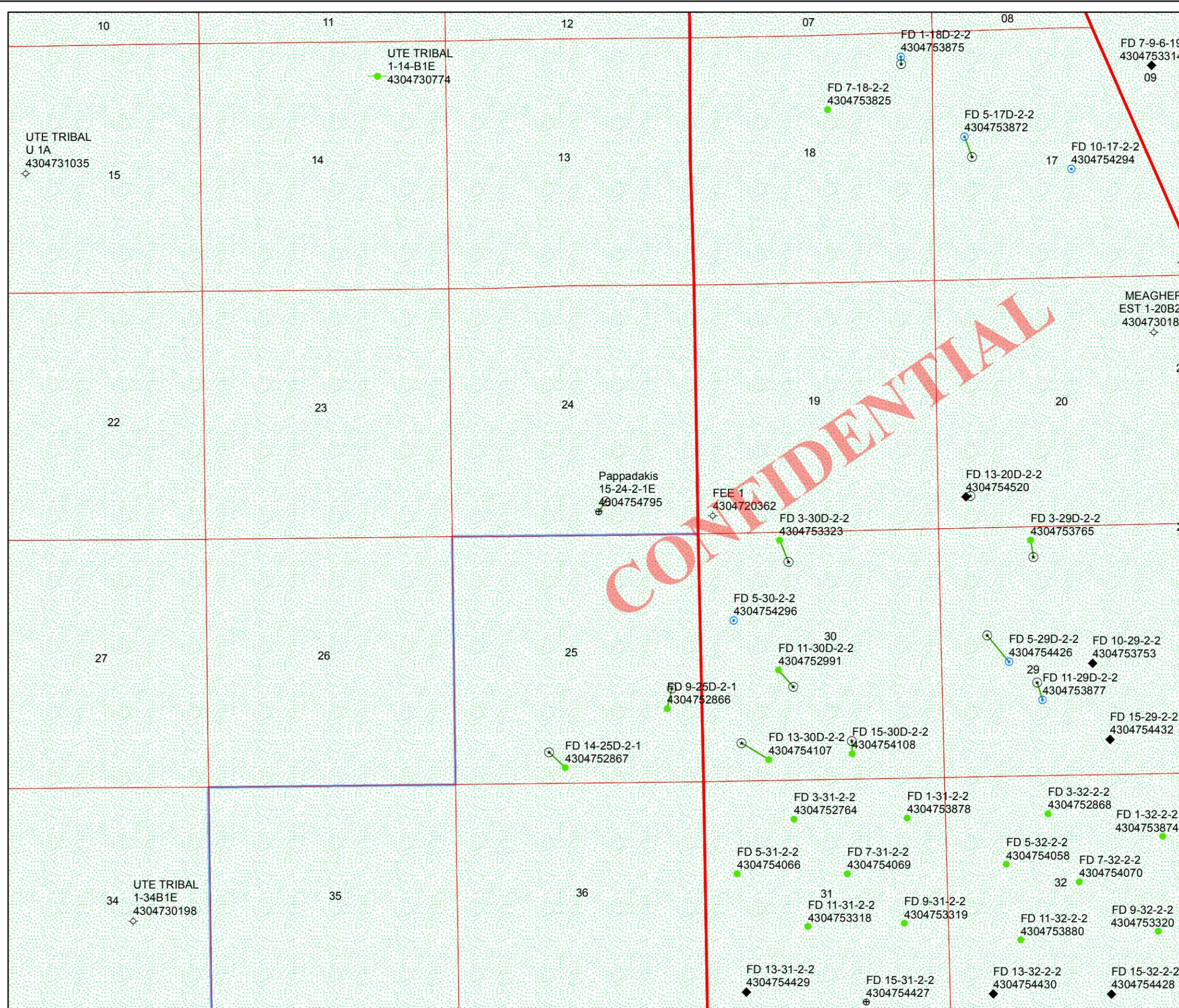
Well Name: Pappadakis 15-24-2-1E

Section: 24 Township: 2S Range: 1E Meridian: USM

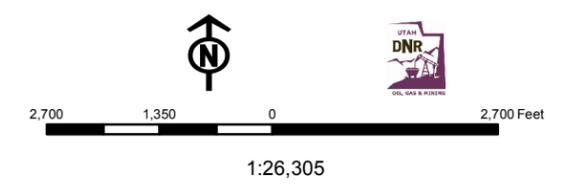
Operator: RIG II, LLC

Map Prepared: Oct. 15, 2014

Map Produced by Lisha Cordova



Wells Query		Units	
Status		STATUS	
◆	APD - Aproved Permit	▨	ACTIVE
○	DRL - Spuded (Drilling Commenced)	▨	EXPLORATORY
↗	GIW - Gas Injection	▨	GAS STORAGE
★	GS - Gas Storage	▨	NF PP OIL
⊕	LOC - New Location	▨	NF SECONDARY
△	OPS - Operation Suspended	▨	PI OIL
⊖	PA - Plugged Abandoned	▨	PP GAS
⊙	PGW - Producing Gas Well	▨	PP GEOTHERML
●	POW - Producing Oil Well	▨	PP OIL
⊙	SGW - Shut-in Gas Well	▨	SECONDARY
●	SOW - Shut-in Oil Well	▨	TERMINATED
⊖	TA - Temp. Abandoned		
○	TW - Test Well		
↘	WDW - Water Disposal		
↗	WW - Water Injection Well		
●	WSW - Water Supply Well		
Fields		STATUS	
		▨	Unknown
		▨	ABANDONED
		▨	ACTIVE
		▨	COMBINED
		▨	INACTIVE
		▨	STORAGE
		▨	TERMINATED



Well Name	RIG II, LLC Pappadakis 15-24-2-1E 43047547950000			
String	COND	SURF	PROD	
Casing Size(")	16.000	9.625	5.500	
Setting Depth (TVD)	80	1500	10000	
Previous Shoe Setting Depth (TVD)	0	80	1500	
Max Mud Weight (ppg)	8.3	8.6	9.2	
BOPE Proposed (psi)	0	500	5000	
Casing Internal Yield (psi)	1000	3520	10640	
Operators Max Anticipated Pressure (psi)	4681		9.0	

Calculations	COND String	16.000	"
Max BHP (psi)	.052*Setting Depth*MW=	35	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	25	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	17	NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	17	NO
Required Casing/BOPE Test Pressure=		80	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient

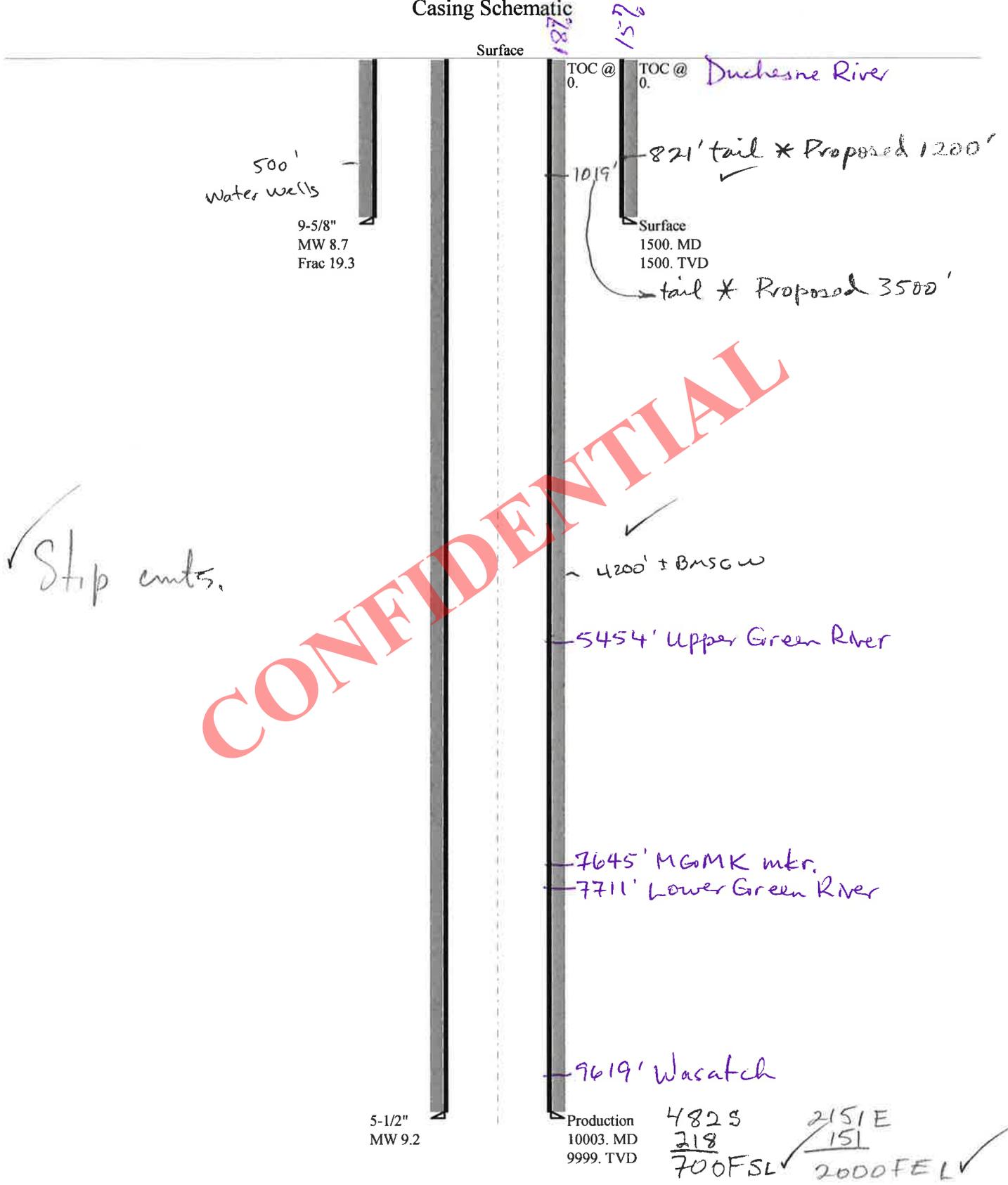
Calculations	SURF String	9.625	"
Max BHP (psi)	.052*Setting Depth*MW=	671	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	491	YES diverter
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	341	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	359	NO OK
Required Casing/BOPE Test Pressure=		1500	psi
*Max Pressure Allowed @ Previous Casing Shoe=		80	psi *Assumes 1psi/ft frac gradient

Calculations	PROD String	5.500	"
Max BHP (psi)	.052*Setting Depth*MW=	4784	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3584	YES 5M BOP, two ram preventers, annular preventer, choke
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	2584	YES manifold
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	2914	NO OK
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		1500	psi *Assumes 1psi/ft frac gradient

Calculations	String		"
Max BHP (psi)	.052*Setting Depth*MW=		
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

# 43047547950000 Pappadakis 15-24-2-1E

## Casing Schematic



**CONFIDENTIAL**

Well name:	<b>43047547950000 Pappadakis 15-24-2-1E</b>		
Operator:	<b>RIG II, INC</b>	Project ID:	43-047-54795
String type:	Surface		
Location:	UINTAH COUNTY		

**Design parameters:****Collapse**

Mud weight: 8.700 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 95 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 1,320 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 1,500 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.70 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Tension is based on buoyed weight.

Neutral point: 1,307 ft

**Directional Info - Build & Hold**

Kick-off point 500 ft  
Departure at shoe: 27 ft  
Maximum dogleg: 0 °/100ft  
Inclination at shoe: 1.6 °

**Re subsequent strings:**

Next setting depth: 9,999 ft  
Next mud weight: 9.200 ppg  
Next setting BHP: 4,779 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 1,500 ft  
Injection pressure: 1,500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	1500	9.625	36.00	J-55	ST&C	1500	1500	8.796	13038
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	678	2020	2.980	1500	3520	2.35	47	394	8.38 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: October 30, 2014  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 1500 ft, a mud weight of 8.7 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Well name:	<b>43047547950000 Pappadakis 15-24-2-1E</b>		
Operator:	<b>RIG II, INC</b>	Project ID:	43-047-54795
String type:	Production		
Location:	UINTAH COUNTY		

**Design parameters:****Collapse**

Mud weight: 9.200 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 214 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,000 ft

**Burst:**

Design factor 1.00

Cement top: Surface

**Burst**

Max anticipated surface pressure: 2,579 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 4,779 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.60 (B)

**Directional Info - Build & Hold**

Kick-off point 500 ft  
Departure at shoe: 265 ft  
Maximum dogleg: 0 °/100ft  
Inclination at shoe: 1.6 °

Tension is based on buoyed weight.

Neutral point: 8,607 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	10003	5.5	17.00	P-110	LT&C	9999	10003	4.767	65887
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	4779	7480	1.565	4779	10640	2.23	146.3	445	3.04 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: October 30, 2014  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 9999 ft, a mud weight of 9.2 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

**Operator** RIG II, LLC  
**Well Name** Pappadakis 15-24-2-1E  
**API Number** 43047547950000      **APD No** 10377      **Field/Unit** BLUEBELL  
**Location: 1/4,1/4 SWSE**      **Sec** 24      **Tw** 2.0S      **Rng** 1.0E      482 FSL 2151 FEL  
**GPS Coord (UTM)**      **Surface Owner** Pappas George N and Cathie M etal

### Participants

Don Hamilton (permit contractor), Scott Duncan (Rig 2)

### Regional/Local Setting & Topography

This proposed location sits approximately 1 mile south of Highway 40, approximately 1 mile east of the Uintah River and 2.5 miles east of Bottle Hollow Reservoir. The well is placed on a rise in the south west corner of an irrigated farm field. As situated the well is placed outside the irrigated area in a spot unsuitable for agriculture.

### Surface Use Plan

#### **Current Surface Use**

Grazing

#### **New Road**

Miles

0.1

#### **Well Pad**

Width 305      Length 400

#### **Src Const Material**

Onsite

#### **Surface Formation**

UNTA

**Ancillary Facilities** N

**Waste Management Plan Adequate?** Y

### Environmental Parameters

**Affected Floodplains and/or Wetlands** N

#### **Flora / Fauna**

Rabbit brush, small sage, grasses, shadscale

#### **Soil Type and Characteristics**

Sandy loam with some exposed rock

**Erosion Issues** N

**Sedimentation Issues** N

**Site Stability Issues** N

#### **Drainage Diversion Required?** Y

Diversion needed around south end of location above reserve pit.

#### **Berm Required?** Y

Permeable soil and nearby farm field

**Erosion Sedimentation Control Required? N****Paleo Survey Run? N    Paleo Potential Observed? N    Cultural Survey Run? N    Cultural Resources? N****Reserve Pit****Site-Specific Factors****Site Ranking**

<b>Distance to Groundwater (feet)</b>	25 to 75	15
<b>Distance to Surface Water (feet)</b>	>1000	0
<b>Dist. Nearest Municipal Well (ft)</b>	>5280	0
<b>Distance to Other Wells (feet)</b>	>1320	0
<b>Native Soil Type</b>	High permeability	20
<b>Fluid Type</b>	TDS>10000	15
<b>Drill Cuttings</b>	Normal Rock	0
<b>Annual Precipitation (inches)</b>		0
<b>Affected Populations</b>		
<b>Presence Nearby Utility Conduits</b>	Not Present	0
<b>Final Score</b>		50    1 Sensitivity Level

**Characteristics / Requirements**

The proposed reserve is to be 205ft by 100ft by 10ft deep. The reserve pit will be placed in a cut stable location with a good deal of rock. There is permeable top soil and this reserve pit will require a 16 mil liner and a felt subliner. If water is encountered during construction of the reserve pit should be closed and a closed loop drilling system must be used. It appears ground water is much deeper than the pit.

**Closed Loop Mud Required? N    Liner Required? Y    Liner Thickness 16    Pit Underlayment Required? Y****Other Observations / Comments**Richard Powell  
Evaluator10/22/2014  
Date / Time

**Application for Permit to Drill  
Statement of Basis  
Utah Division of Oil, Gas and Mining**

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
10377	43047547950000	LOCKED	OW	P	No
<b>Operator</b>	RIG II, LLC		<b>Surface Owner-APD</b>	Pappas George N and Cathie M etal	
<b>Well Name</b>	Pappadakis 15-24-2-1E		<b>Unit</b>		
<b>Field</b>	BLUEBELL		<b>Type of Work</b>	DRILL	
<b>Location</b>	SWSE 24 2S 1E U 482 FSL (UTM) 599529E 4460469N		2151 FEL GPS Coord		

**Geologic Statement of Basis**

RIG II proposes to set 80 feet of conductor and 1,500 feet of surface casing at this location. The entire surface hole will be drilled with fresh water mud. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 4,200'. A search of Division of Water Rights records shows 10 water wells within a 10,000 foot radius of the center of Section 24. The wells are 60-500 feet in depth with listed uses as domestic, irrigation and stock watering. The wells probably produce water from near-surface alluvium and the Uinta Formation. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up to or above the base of the moderately saline ground water.

Brad Hill  
APD Evaluator

11/10/2014  
Date / Time

**Surface Statement of Basis**

This proposed oil well is on fee surface with fee minerals. Surface owner Mike Pappas was contacted and invited but chose not to attend this onsite inspection. Mr. Pappas stated that he had no concerns with drilling at this site and expressed a desire that drilling begin as soon as possible. This well sits approximately 0.1 mile just to the north of a paved road on the south side of Gusher, Utah. To the north and east there is an irrigated farm field. This well site sits on a rocky rise well out of reach of the irrigation sprinklers and any cultivated land. A reserve pit is proposed and it appears there are no ground water concerns in this site. The soil here is shallow but very permeable and there is exposed rock at the ground surface. It appears blasting may be required for pit construction. A minimum 16 mil liner and felt subliner will be required. From the south east a small drainage crosses the edge of the proposed reserve pit. A diversion will be needed to around the south/upper side of the reserve pit area around to the west. Due to the permeable soil and close proximity of cropland this well site should be bermed to contain any leaked or spilled fluids to the well pad.

Richard Powell  
Onsite Evaluator

10/22/2014  
Date / Time

**Conditions of Approval / Application for Permit to Drill**

Category	Condition
----------	-----------

Pits	A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	The well site shall be bermed to prevent fluids from entering or leaving the pad.
Surface	Measures (BMP's) shall be taken to protect steep slopes and topsoil pile from erosion, sedimentation and stability issues.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

**CONFIDENTIAL**

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 10/7/2014

API NO. ASSIGNED: 43047547950000

WELL NAME: Pappadakis 15-24-2-1E

OPERATOR: RIG II, LLC (N4055)

PHONE NUMBER: 435 650-3866

CONTACT: Don Hamilton

PROPOSED LOCATION: SWSE 24 020S 010E

Permit Tech Review: 

SURFACE: 0482 FSL 2151 FEL

Engineering Review: 

BOTTOM: 0700 FSL 2000 FEL

Geology Review: 

COUNTY: UINTAH

LATITUDE: 40.28879

LONGITUDE: -109.82907

UTM SURF EASTINGS: 599529.00

NORTHINGS: 4460469.00

FIELD NAME: BLUEBELL

LEASE TYPE: 4 - Fee

LEASE NUMBER: Fee

PROPOSED PRODUCING FORMATION(S): GREEN RIVER(LWR)-WASATCH

SURFACE OWNER: 4 - Fee

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: STATE - LPM9124567
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: 43-12345
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingle Approved

## LOCATION AND SITING:

- R649-2-3.
- Unit:
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: 139-42
- Effective Date: 4/12/1985
- Siting: 2 Wells Per 640 Acre
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 1 - Exception Location - Icordova  
 5 - Statement of Basis - bhill  
 12 - Cement Volume (3) - hmacdonald  
 15 - Directional - Icordova  
 25 - Surface Casing - hmacdonald



GARY R. HERBERT  
*Governor*

SPENCER J. COX  
*Lieutenant Governor*

## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

### Permit To Drill

\*\*\*\*\*

**Well Name:** Pappadakis 15-24-2-1E

**API Well Number:** 43047547950000

**Lease Number:** Fee

**Surface Owner:** FEE (PRIVATE)

**Approval Date:** 11/12/2014

**Issued to:**

RIG II, LLC, P.O. Box 6150, Denver, CO 80206

**Authority:**

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of 139-42. The expected producing formation or pool is the GREEN RIVER(LWR)-WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

**Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

**Exception Location:**

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

**General:**

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**Conditions of Approval:**

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Cement volume for the 5 1/2 production string shall be determined from actual hole diameter in order to place lead cement from the pipe setting depth back to surface and tail cement to 3500' as indicated in the submitted drilling plan.

Surface casing shall be cemented to the surface.

Compliance with the Conditions of Approval/Application for Permit to Drill

outlined in the Statement of Basis (copy attached).

**Additional Approvals:**

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels  
OR  
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website  
at <http://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program  
- contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

**Contact Information:**

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office  
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office  
801-231-8956 - after office hours

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

**Approved by:**

A handwritten signature in black ink, appearing to read "J. Rogers", written in a cursive style.

For John Rogers  
Associate Director, Oil & Gas

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
1. TYPE OF WELL Oil Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: RIG II, LLC	7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: P.O. Box 6150, Denver, CO, 80206	8. WELL NAME and NUMBER: Pappadakis 15-24-2-1E
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0482 FSL 2151 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 24 Township: 02.0S Range: 01.0E Meridian: U	9. API NUMBER: 43047547950000
9. FIELD and POOL or WILDCAT: BLUEBELL	COUNTY: UINTAH
	STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 11/20/2014	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Rig II, LLC respectfully requests that that the production hole size increase from 7.875-inch to 8.75-inch. Attached please find an updated drilling plan reflecting this change with appropriate changes to the cement volumes.

Approved by the  
 November 20, 2014  
 Oil, Gas and Mining

Date: \_\_\_\_\_

By: Don Hamilton

<b>NAME (PLEASE PRINT)</b> Don Hamilton	<b>PHONE NUMBER</b> 435 650-3866	<b>TITLE</b> Permitting Agent
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/15/2014	

**Rig II, LLC**  
**Pappadakis 15-24-2-1E**  
**SWSE, Section 24 T2S, R1E, U.S.B.&M.**  
**Uintah County, UT**

**Drilling Program**

1. <b>Formation Tops</b>	MD	TVD
Duchesne River /Uint	Surface	Surface
Upper Green River	5,456'	5,454'
MGMK Marker	7,648'	7,645'
Lower Green River	7,714'	7,711'
Wasatch	9,623'	9,619'
TD	10,003'	10,000'

2. **Depth to Oil, Gas, Water, or Minerals**

Upper Green River	5,456' - 5,454'	(Oil)
Lower Green River	7,714' - 7,711'	(Oil)
Wasatch	9,623' - 9,619'	(Oil)

Fresh water may be encountered in the Duchesne Formation, but is not expected below about 300'.

3. **Pressure Control**

Section                      BOP Description

Surface                      12-1/4" diverter

Interm/Prod                The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc for a 5M system.

A 5M BOP system will consist of 2 ram preventers (double or two singles) and an annular preventer (see attached diagram). A choke manifold rated to at least 5,000 psi will be used.

4. **Casing**

Description	Interval (MD)		Weight (ppf)	Grade	Coup	Pore Press @ Shoe	MW @ Shoe	Frac Grad @ Shoe	Safety Factors		
	Top	Bottom							Burst	Collapse	Tension
Conductor 16	0'	80'	48	H-40	STC	--	--	--	1,730	770	322,000
Surface 9 5/8	0'	1,500'	36	J-55	STC	8.33	8.33	12	3,520	2,020	394,000
Production 5 1/2	0'	10,000'	17	P-110	LTC	9	9.2	11	4.18	4.23	7.30
									7,740	6,280	348,000
									2.10	1.66	2.05

**Assumptions:**

Surface casing MASP = (frac gradient + 1.0 ppg) - (gas gradient)

Intermediate casing MASP = (reservoir pressure) - (gas gradient)

Production casing MASP = (reservoir pressure) - (gas gradient)

All collapse calculations assume fully evacuated casing with a gas gradient

All tension calculations assume air weight of casing

Gas gradient = 0.1 psi/ft

All casing shall be new.

All casing strings shall have a minimum of 1 centralizer on each of the bottom 3 joints.

**5. Cement**

Job	Hole Size	Fill	Slurry Description	ft <sup>3</sup>	OH excess	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
				sacks			
Conductor	24	80'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	161	15%	15.8	1.17
				137			
Surface Lead	12 1/4	1,200'	Class G w/ 2% KCl + 0.25 lbs/sk Flocele	752	100%	15.8	1.15
				654			
Surface Tail	12 1/4	300'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	392	100%	15.8	1.17
				335			
Production Lead	8 3/4	3,500'	Econocem-1# granulite+.25# polyflake	1105	25%	11.0	3.10
				357			
Production Tail	8 3/4	6,500'	Econocem- .95%bw HR-5+.125# polyflake	3393	25%	13.0	2.10
				1616			

The surface casing will be cemented to surface. In the event that cement does not reach surface during the primary cement job, a remedial job will be performed.

Actual cement volumes for the production casing string will be calculated from an open hole caliper log, plus 25% excess.

**6. Type and Characteristics of Proposed Circulating Medium****Interval****Description**

Surface - 1,500' An air and/or fresh water system will be utilized.

1,500' - TD A water based mud system will be utilized. Hole stability may be improved with additions of KCl or a similar inhibitive substance. In order to control formation pressure the system will be weighted with additions of bentonite, and if conditions warrant, with barite.  
Anticipated maximum mud weight is 9.2 ppg.

**7. Logging, Coring, and Testing**

Logging: A dual induction, gamma ray, and caliper log will be run from TD to the base of the surface casing. A compensated neutron/formation density log will be run from TD to the top of the Garden Gulch formation. A cement bond log will be run from

PBTD to the cement top behind the production casing.

Cores: As deemed necessary.

DST: There are no DST's planned for this well.

## 8. Anticipated Abnormal Pressure or Temperature

Maximum anticipated bottomhole pressure will be approximately equal to total depth (feet) multiplied by 0.47 psi/ft gradient.

$$10,000' \times 0.47 \text{ psi/ft} = 4680 \text{ psi}$$

No abnormal temperature is expected. No H<sub>2</sub>S is expected.

## 9. Other Aspects

This is planned as a vertical well

**Based on prior drilling experience in the area, Rig II, LLC is confident that the 5 1/2" 15.5# production is more than sufficient to avoid any possible mechanical integrity problems relating to collapse or burst conditions.**

Variance Request for FIT Requirements:

Rig II, LLC respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the Pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Variance Request for Air Drilling Requirements:

Rig II, LLC respectfully requests a variance to Onshore Order #2, III.E.1

- Dust suppression equipment. Variance granted for water mist system to substitute for the dust suppression equipment.
- Blooie line discharge 100' from the well bore. Variance granted for blooie line discharge to be 75' from the well bore.
- Compressors located in the opposite direction from the blooie line a minimum of 100' from the wellbore. Variance granted for truck/trailer mounted air compressors.
- Straight run blooie line. Variance granted for targeted "T's" at bends.
- Automatic igniter. Variance granted for igniter due to water mist.
- Air drilling operations will be conducted only during drilling of the surface casing hole, there is no history of hydrocarbons being encountered in this hole section in the area where these wells are to be drilled.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
1. TYPE OF WELL Oil Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: RIG II, LLC	7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: P.O. Box 6150 , Denver, CO, 80206	8. WELL NAME and NUMBER: Pappadakis 15-24-2-1E
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0482 FSL 2151 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 24 Township: 02.0S Range: 01.0E Meridian: U	9. API NUMBER: 43047547950000
3. ADDRESS OF OPERATOR: P.O. Box 6150 , Denver, CO, 80206	PHONE NUMBER: 801 298-9866 Ext
9. FIELD and POOL or WILDCAT: BLUEBELL	COUNTY: UINTAH
STATE: UTAH	STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 11/15/2014	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The Pappadakis 15-24-2-1E was spud on Saturday November 15, 2014 and 80 feet of conductor pipe was set.

**Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
 FOR RECORD ONLY  
 November 21, 2014**

<b>NAME (PLEASE PRINT)</b> Don Hamilton	<b>PHONE NUMBER</b> 435 650-3866	<b>TITLE</b> Permitting Agent
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/19/2014	

Effective Date: 11/21/2014

<b>FORMER OPERATOR:</b>	<b>NEW OPERATOR:</b>
RIG II, LLC N4055 PO BOX 6150 DENVER CO 80206 801-298-9866	GASCO PRODUCTION COMPANY N2575 7979 E TUFTS AVE, STE 1150 DENVER CO 80237 303-996-1805
CA Number(s): N/A	Unit(s): N/A

**WELL INFORMATION:**

Well Name	Sec	TWN	RNG	API	Entity	Mineral	Surface	Type	Status
PAPPADAKIS 15-24-2-1E	24	2S	1E	4304754795		FEE	FEE	OW	APD

**OPERATOR CHANGES DOCUMENTATION:**

- Sundry or legal documentation was received from the **FORMER** operator on: 11/20/2014
- Sundry or legal documentation was received from the **NEW** operator on: 11/20/2014
- New operator Division of Corporations Business Number: 1454161-0143

**REVIEW:**

- Surface Agreement Sundry from **NEW** operator on Fee Surface wells received on: 11/20/2014
- Receipt of Acceptance of Drilling Procedures for APD/New on: 11/20/2014
- Reports current for Production/Disposition & Sundries: N/A
- OPS/SI/TA well(s) reviewed for full cost bonding: N/A
- UIC5 on all disposal/injection/storage well(s) approved on: N/A
- Surface Facility(s) included in operator change: N/A
- Inspections of PA state/fee well sites complete on (only upon operators request): N/A

**NEW OPERATOR BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: N/A
- Indian well(s) covered by Bond Number: N/A
- State/fee well(s) covered by Bond Number(s): K08792707

**DATA ENTRY:**

- Well(s) update in the **OGIS** on: 11/21/2014
- Entity Number(s) updated in **OGIS** on: N/A
- Unit(s) operator number update in **OGIS** on: N/A
- Surface Facilities update in **OGIS** on: N/A
- State/Fee well(s) attached to bond(s) in **RBDMS** on: 11/21/2014
- Surface Facilities update in **RBDMS** on: N/A

**LEASE INTEREST OWNER NOTIFICATION:**

- The **NEW** operator of the Fee (Mineral) wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

**COMMENTS:**

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

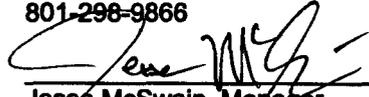
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>Fee</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL <b>OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____</b>	8. WELL NAME and NUMBER: <b>Pappadakis 15-24-2-1E</b>	
2. NAME OF OPERATOR: <b>Rig II, LLC N4055</b>	9. API NUMBER: <b>4304754795</b>	
3. ADDRESS OF OPERATOR: <b>P. O. Box 6150 CITY Denver STATE CO ZIP 80206</b>	PHONE NUMBER: <b>(801) 298-9866</b>	10. FIELD AND POOL, OR WILDCAT: <b>Bluebell</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>482 FSL &amp; 2151 FEL</b>		COUNTY: <b>Uintah</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWSE 24 2S 1E U</b>		STATE: <b>UTAH</b>

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>11/21/14</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
**Rig II, LLC intends to change the operator on the Pappadakis 15-24-2-1E from Rig II, LLC to Gasco Production Company. Effective date of 11/1/2014, with signatures from authorized officers at both companies.**

**Rig II, LLC**  
P.O. Box 6150 Denver, CO 80206  
801-298-9866

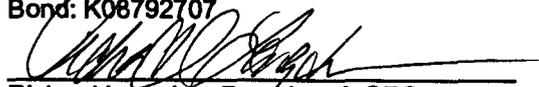
  
**Jesse McSwain, Manager**

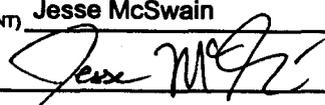
**RECEIVED**

**NOV 21 2014**

Div. of Oil, Gas & Mining

**Gasco Production Company N2575**  
7979 E Tufts Ave, Suite 1150 Denver, CO 80237  
303-996-1805  
Bond: K06792707

  
**Richard Langdon, President & CEO**

NAME (PLEASE PRINT) <u>Jesse McSwain</u>	TITLE <u>Manager</u>
SIGNATURE 	DATE <u>11/19/2014</u>

(This space for State use only) APD/ow Fee/Fee

**APPROVED**

**NOV 21 2014**

DIV. OIL GAS & MINING  
 BY: Rachel Medina

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**Request to Transfer Application or Permit to Drill**

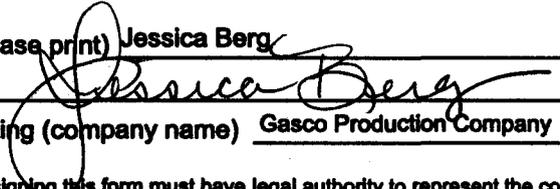
(This form should accompany a Sundry Notice, Form 9, requesting APD transfer)

<b>Well name:</b>	Pappadakis 15-24-2-1E
<b>API number:</b>	4304754795
<b>Location:</b>	Qtr-Qtr: <b>SWSE</b> Section: <b>24</b> Township: <b>2S</b> Range: <b>1E</b>
<b>Company that filed original application:</b>	Rig II, LLC
<b>Date original permit was issued:</b>	11/12/2014
<b>Company that permit was issued to:</b>	Rig II, LLC

Check one	Desired Action:
<input type="checkbox"/>	Transfer pending (unapproved) Application for Permit to Drill to new operator
<input type="checkbox"/>	The undersigned as owner with legal rights to drill on the property, hereby verifies that the information as submitted in the pending Application for Permit to Drill, remains valid and does not require revision. The new owner of the application accepts and agrees to the information and procedures as stated in the application.
<input checked="" type="checkbox"/>	Transfer approved Application for Permit to Drill to new operator
<input type="checkbox"/>	The undersigned as owner with legal rights to drill on the property as permitted, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.	Yes	No
If located on private land, has the ownership changed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If so, has the surface agreement been updated?	<input type="checkbox"/>	<input type="checkbox"/>
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have there been any changes to the access route including ownership or right-of-way, which could affect the proposed location?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Has the approved source of water for drilling changed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is bonding still in place, which covers this proposed well? Bond No. <u>K08792707</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Any desired or necessary changes to either a pending or approved Application for Permit to Drill that is being transferred, should be filed on a Sundry Notice, Form 9, or amended Application for Permit to Drill, Form 3, as appropriate, with necessary supporting information as required.

Name (please print) Jessica Berg Title Regulatory Analyst  
 Signature  Date 11/19/2014  
 Representing (company name) Gasco Production Company

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator on the Application for Permit to Drill.

Gasco Myton, Utah - Notification Form

CONFIDENTIAL

Operator GASCO PROD. Rig Name/# FRONTIER 15  
Submitted By SCOTT ALLRED Phone Number 435-828-0601  
Well Name/Number PAPADAKIS 15-24-2-1E  
Qtr/Qtr SW 4 /SE 4 Section 24 Township 2 S Range 1 E  
Lease Serial Number FEE  
API Number 4304754795

SPUD NOTICE – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM PM

CASING – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time 11/29/2014 11:00 AM PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

Date/Time \_\_\_\_\_ AM PM

Remarks If you would like to witness, please call for a more exact time  
Thank You

Gasco Myton, Utah - Notification Form

**CONFIDENTIAL**

Operator GASCO PROD. Rig Name/# FRONTIER 15  
Submitted By SCOTT ALLRED Phone Number 435-828-0601  
Well Name/Number PAPADAKIS 15-24-2-1E  
Qtr/Qtr SW 4 /SE 4 Section 24 Township 2 S Range 1 E  
Lease Serial Number FEE  
API Number 4304754795

---

SPUD NOTICE – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM PM

---

CASING – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time 11/27/2014 11:00 AM PM

---

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

Date/Time \_\_\_\_\_ AM PM

Remarks If you would like to witness, please call for a more exact time  
Thank You

Gasco Myton, Utah - Notification Form

Operator GASCO PROD. Rig Name/# FRONTIER 15  
Submitted By SCOTT ALLRED Phone Number 435-828-0601  
Well Name/Number PAPADAKIS 15-24-2-1E  
Qtr/Qtr SW 4 /SE 4 Section 24 Township 2 S Range 1 E  
Lease Serial Number FEE  
API Number 4304754795

SPUD NOTICE – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM PM

CASING – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time 12/20/14 2:00 AM PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

Date/Time \_\_\_\_\_ AM PM

Remarks If you would like to witness, please call for a more exact time  
Thank You

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9	
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> Fee	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>	
		<b>7. UNIT or CA AGREEMENT NAME:</b>	
<b>1. TYPE OF WELL</b> Oil Well		<b>8. WELL NAME and NUMBER:</b> Pappadakis 15-24-2-1E	
<b>2. NAME OF OPERATOR:</b> GASCO PRODUCTION COMPANY		<b>9. API NUMBER:</b> 43047547950000	
<b>3. ADDRESS OF OPERATOR:</b> 7979 East Tufts Avenue, Suite 1150 , Denver, CO, 80237	<b>PHONE NUMBER:</b> 303 996-1805 Ext	<b>9. FIELD and POOL or WILDCAT:</b> BLUEBELL	
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0482 FSL 2151 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSE Section: 24 Township: 02.0S Range: 01.0E Meridian: U		<b>COUNTY:</b> UINTAH	
		<b>STATE:</b> UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 1/10/2015  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input checked="" type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.			
This well was put on production and turned to the sales tank on 1/10/2015. The first sales from this well was on 1/14/2015.			
<b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY January 27, 2015</b>			
<b>NAME (PLEASE PRINT)</b> Lindsey J. Cooke	<b>PHONE NUMBER</b> 303 996-1834	<b>TITLE</b> Production Tech	
<b>SIGNATURE</b> N/A		<b>DATE</b> 1/26/2015	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> Fee
	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
	<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> Pappadakis 15-24-2-1E
<b>2. NAME OF OPERATOR:</b> GASCO PRODUCTION COMPANY	<b>9. API NUMBER:</b> 43047547950000
<b>3. ADDRESS OF OPERATOR:</b> 7979 East Tufts Avenue, Suite 1150 , Denver, CO, 80237	<b>PHONE NUMBER:</b> 303 996-1805 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0482 FSL 2151 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSE Section: 24 Township: 02.0S Range: 01.0E Meridian: U	<b>9. FIELD and POOL or WILDCAT:</b> BLUEBELL
	<b>COUNTY:</b> UINTAH
	<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 1/10/2015	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input checked="" type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Gasco intends to dispose of produced water using the following State approved disposal facilities: Brennan Bottom Disposal and Western Water Solutions, both in Roosevelt, Utah.

**Approved by the**  
**March 06, 2015**  
**Oil, Gas and Mining**

**Date:** \_\_\_\_\_  
**By:** 

<b>NAME (PLEASE PRINT)</b> Lindsey J. Cooke	<b>PHONE NUMBER</b> 303 996-1834	<b>TITLE</b> Production Tech
<b>SIGNATURE</b> N/A	<b>DATE</b> 1/26/2015	

Effective Date: 4/16/2015

<b>FORMER OPERATOR:</b>	<b>NEW OPERATOR:</b>
Gasco Production Company N2575 7979 E. Tufts Avenue, Suite 11500 Denver, CO 80237 303-996-1805	Badlands Energy-Utah. LLC N4165 7979 E. Tufts Avenue, Suite 11500 Denver, CO 80237 303-996-1805
CA Number(s):	Unit(s):

**WELL INFORMATION:**

Well Name	Sec	TWN	RNG	API	Entity	Mineral	Surface	Type	Status
Pappadakis 15-24-2-1E	24	020S	010E	4304754795	19803	Fee	Fee	OW	DRL

**OPERATOR CHANGES DOCUMENTATION:**

- Sundry or legal documentation was received from the **FORMER** operator on: 6/2/2015
- Sundry or legal documentation was received from the **NEW** operator on: 6/2/2015
- New operator Division of Corporations Business Number: 9170641-0161

**REVIEW:**

- Surface Agreement Sundry from **NEW** operator on Fee Surface wells received on: 6/2/2015
- Receipt of Acceptance of Drilling Procedures for APD on: 6/2/2015
- Reports current for Production/Disposition & Sundries: 6/3/2015
- OPS/SI/TA well(s) reviewed for full cost bonding: N/A
- UIC5 on all disposal/injection/storage well(s) approved on: N/A
- Surface Facility(s) included in operator change: None
- Inspections of PA state/fee well sites complete on (only upon operators request): N/A

**NEW OPERATOR BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: N/A
- Indian well(s) covered by Bond Number: N/A
- State/fee well(s) covered by Bond Number(s): SUR0027845

**DATA ENTRY:**

- Well(s) update in the **OGIS** on: 6/5/2015
- Entity Number(s) updated in **OGIS** on: 6/5/2015
- Unit(s) operator number update in **OGIS** on: N/A
- Surface Facilities update in **OGIS** on: N/A
- State/Fee well(s) attached to bond(s) in **RBDMS** on: 6/5/2015
- Surface Facilities update in **RBDMS** on: N/A

**LEASE INTEREST OWNER NOTIFICATION:**

- The **NEW** operator of the Fee (Mineral) wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 6/5/2015

**COMMENTS:**



**BADLANDS ENERGY, INC.**

April 21, 2015

**RE: DECLARATION OF NAME CHANGES**

RECEIVED

JUN 02 2015

**To Whom It May Concern:**

DIV. OF OIL, GAS & MINING

Effective this day, the name of our primary corporate entity has been changed from Gasco Energy, Inc. to Badlands Energy, Inc. Our wholly owned subsidiary, Gasco Production Company, will now be known as Badlands Production Company.

These name changes have been filed and approved in our domicile states as well as states in which these entities are registered as a foreign corporation.

Our addresses, phone and fax numbers remain the same. Email extensions should be revised to read: @badlandsenergy.com

Thank you for your assistance with updating our records.

If you have any questions or require additional documentation, you may contact our Office Manager, Judith Encinias, at 303/996-1810 or via email at [jencinias@badlandsenergy.com](mailto:jencinias@badlandsenergy.com).

Sincerely,



**Richard S. Langdon**  
President & CEO

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>			5. LEASE DESIGNATION AND SERIAL NUMBER: <b>Fee</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____			7. UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: <b>GASCO PRODUCTION COMPANY</b>			8. WELL NAME and NUMBER: <b>Pappadakis 15-24-2-1E</b>
3. ADDRESS OF OPERATOR: <b>7979 E Tufts Ave, Ste. 1150</b> CITY <b>Denver</b> STATE <b>CO</b> ZIP <b>80237</b>		PHONE NUMBER: <b>(303) 996-1805</b>	9. API NUMBER: <b>4304754795</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>0482 FSL 2151 FEL</b>  QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWSE 24 2S 1E U</b>			10. FIELD AND POOL, OR WLD CAT: <b>BLUEBELL</b>  COUNTY: <b>UINTAH</b>  STATE: <b>UTAH</b>

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start: <u>4/16/2015</u>  <input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: _____	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input checked="" type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION (START/RESUME) <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	<input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUT-OFF <input type="checkbox"/> OTHER: _____

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Gasco Production Company requests a change of operator on this well from Gasco Production Company to Badlands Energy – Utah, LLC, effective date of 4/16/2015.

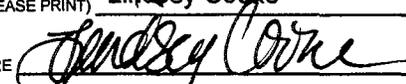
Gasco Production Company  
7979 E. Tufts Ave, Suite 1150  
Denver CO 80237  
303-996-1805

  
Michael Decker, Exec. Vice President & COO

Badlands Energy – Utah, LLC  
7979 E. Tufts Ave, Suite 1150  
Denver CO 80237  
303-996-1805

  
Michael Decker, Exec. Vice President & COO

**RECEIVED**  
JUN 02 2015  
DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) <u>Lindsey Cooke</u>	TITLE <u>Engineering Tech</u>
SIGNATURE 	DATE <u>5/29/2015</u>

(This space for State use only)

**APPROVED**  
JUN 05 2015

DIV. OIL GAS & MINING  
BY: Rachael Medina

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT  FORM 8  
(highlight changes)

<b>WELL COMPLETION OR RECOMPLETION REPORT AND LOG</b>		5. LEASE DESIGNATION AND SERIAL NUMBER:
1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
b. TYPE OF WORK: NEW WELL <input type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME
2. NAME OF OPERATOR:		8. WELL NAME and NUMBER:
3. ADDRESS OF OPERATOR: CITY STATE ZIP PHONE NUMBER:		9. API NUMBER:
4. LOCATION OF WELL (FOOTAGES) AT SURFACE:  AT TOP PRODUCING INTERVAL REPORTED BELOW:  AT TOTAL DEPTH:		10 FIELD AND POOL, OR WILDCAT
		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
		12. COUNTY 13. STATE <b>UTAH</b>

14. DATE SPUDDED:	15. DATE T.D. REACHED:	16. DATE COMPLETED: ABANDONED <input type="checkbox"/> READY TO PRODUCE <input type="checkbox"/>	17. ELEVATIONS (DF, RKB, RT, GL):
18. TOTAL DEPTH: MD TVD	19. PLUG BACK T.D.: MD TVD	20. IF MULTIPLE COMPLETIONS, HOW MANY? *	21. DEPTH BRIDGE MD PLUG SET: TVD
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)		23. WAS WELL CORED? NO <input type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input type="checkbox"/> (Submit copy)	

**24. CASING AND LINER RECORD (Report all strings set in well)**

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED

**25. TUBING RECORD**

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

26. PRODUCING INTERVALS					27. PERFORATION RECORD				
FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS	
(A)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>

**28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.**

WAS WELL HYDRAULICALLY FRACTURED? YES  NO  IF YES -- DATE FRACTURED: \_\_\_\_\_

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL

29. ENCLOSED ATTACHMENTS:	30. WELL STATUS:
<input type="checkbox"/> ELECTRICAL/MECHANICAL LOGS <input type="checkbox"/> GEOLOGIC REPORT <input type="checkbox"/> DST REPORT <input type="checkbox"/> DIRECTIONAL SURVEY <input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION <input type="checkbox"/> CORE ANALYSIS <input type="checkbox"/> OTHER: _____	

**31. INITIAL PRODUCTION**

**INTERVAL A (As shown in item #26)**

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

**INTERVAL B (As shown in item #26)**

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

**INTERVAL C (As shown in item #26)**

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

**INTERVAL D (As shown in item #26)**

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

**32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)**

**33. SUMMARY OF POROUS ZONES (Include Aquifers):**

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

**34. FORMATION (Log) MARKERS:**

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)

**35. ADDITIONAL REMARKS (Include plugging procedure)**

**36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.**

NAME (PLEASE PRINT) \_\_\_\_\_ TITLE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

As of 3/30/2015

LEASE: Fee  
 FIELD: Bluebell  
 LOCATION: SL: 482' FSL & 2151' FEL SWSE BHL: 705' FSL & 1997' FEL SWSE  
 COUNTY: Uintah ST: Utah API: 43-047-54795

**CONDUCTOR**

SIZE: 16"  
 WT/GRD: H-40  
 WT/GRD: 48#  
 CSA: 80'  
 SX: 137sx 15.8# Class G  
 CIRC: yes  
 TOC: 0  
 HOLE SIZE: 24"

**SURFACE CASING**

SIZE: 9.625"  
 WT/GRD: J-55 LT&C  
 WT/GRD: 36#  
 CSA: 1547'  
 SX (Lead): 276 sx 12# Prem. Lite  
 SX (Tail): 279 sx 15.8# Class G  
 CIRC: yes  
 TOC: 0  
 HOLE SIZE: 12.25"

**PRODUCTION CASING**

SIZE: 5.5"  
 WT/GRD: P-110 LT&C  
 WT/GRD: 17#  
 CSA: 10015'  
 SX (Lead): 1236sx Prem. Lite  
 SX (Tail): 1210sx 50/50 POZ G  
 CIRC: yes  
 TOC: 1000'  
 HOLE SIZE: 7.875"

GL: 5038'  
 SPUD DATE: 11/27/2014  
 COMP DATE: 1/10/2015  
 FIRST OIL: 1/11/2015

DATE FIRST PRODUCED: 1/11/15  
 PRODUCTION METHOD: Flowing  
 CHOKE SIZE:  
 Csg PRESSURE:

**Tubing Detail:** KB 22', Hanger .83', 230 jnts 2 7/8" EUE 8rnd 6.5# L-80 tbg, 7,536.02', 5 1/2" TAC 2.75', 4jnts 2 7/8" EUE 8rnd 6.5# L-80 tbg, 131.10' 2 7/8" EUE 8rnd 6.5# N-80 sub 4.15', Pump cavity 36.17', PSN .81', 2 7/8" EUE 8rnd 6.5# N-80 sub 2.22' 1jnt 2 7/8" EUE 8rnd 6.5# L-80 tbg 32.80', 2 7/8" EUE 8rnd 6.5# N-80 sub 4.15', Desander 19.08', 1jnt 2 7/8" EUE 8rnd 6.5# L-80 tbg 32.79', Purge valve .74', EOT @ 7,825.61' (1/21/15)

**Rod Detail:** 36' x 1 1/2" Polish rod, 2' x1" pony rod, 8' x1" pony rod, 115- 1" S-88 Guided rods, (4 per), 108- 7/8" S-88 Guided rods, (4 per), 71- 3/4" S-88 Guided rods, (4 per), 10- 1 1/2" K bars, 11- 2' x1" guided stabilizer bars, 36' x 1 1/2" polish rod, 2 7/8" x2 1/4" x36x40, THMB Pump, plunger. (1/22/15)

**Stimulation**

**Stage 10:** 1/7/2015 frac'd w/ 149,500# 20-40 premium white sand using 1198 bbls of FR slick water, 1827 bbls 20# Delta 200 gelled fluid

**Stage 9:** 1/7/2015 frac'd w/ 66500# 20-40 premium white sand using 1151 bbls of FR slick water, 1242 bbls 20# Delta 200 gelled fluid

**Stage 8:** 1/7/2015 frac'd w/ 136,800# 20-40 premium white sand using 1149 bbls of FR slick water, 2152 bbls 20# Delta 200 gelled fluid

**Stage 7:** 1/7/2015 frac'd w/ 152,322# 20-40 premium white sand using 1150 bbls of FR slick water, 1874 bbls 20# Delta 200 gelled fluid

**Stage 6:** 1/6/2015 frac'd w/ 141,646# 20-40 premium white sand using 1161 bbls of FR slick water, 2001 bbls 20# Delta 200 gelled fluid

**Stage 5:** 1/6/2015 Zone not frac'd

**Stage 4:** 1/6/2015 frac'd w/ 165,679# 20-40 premium white sand using 1398 bbls of FR slick water, 1944 bbls 20# Delta 200 gelled fluid

**Stage 3:** 1/5/2015 frac'd w/ 163,178# 20-40 premium white sand using 1158 bbls of FR slick water, 2090 bbls 20# Delta 200 gelled fluid

**Stage 2:** 1/3/2015 frac'd w/ 170,674# 20-40 premium white sand using 1359 bbls of FR slick water, 1722 bbls 20# Delta 200 gelled fluid

**Stage 1:** 1/2/2015 frac'd w/ 179,818# 20-40 premium white sand using 1,351 bbls of FR slick water, 2343 bbls 20# Delta 200 gelled fluid

EOT @ 7825.61'

**Stage 10** } 21 shots Mahogany  
7887 - 7972

**Stage 9** } 51 shots Lower Green River  
8061 - 8208

**Stage 8** } 54 shots Douglas Creek  
8235 - 8358

**Stage 7** } 33 total shots Douglas Creek  
8400 - 8494

**Stage 6** } 63 total shots Black Shale, Castle Peak Lime, Douglas Creek  
8535 - 8752

**Stage 5** } 36 total shots Castle Peak  
8816 - 8999

**Stage 4** } 57 total shots Uteland Butte  
9033 - 9217

**Stage 3** } 63 total shots Uteland Butte  
9240 - 9486

**Stage 2** } 51 total shots Wasatch  
9516 - 9722

**Stage 1** } 45 total shots Wasatch  
9734 - 9936

MD 10,030  
 TVD 10,025  
 PBTD 9,975'

Stage 5	Top	Bottom	ft	holes
	8816	8820	4	12
	8839	8840	1	3
	8907	8909	2	6
	8946	8947	1	3
	8977	8978	1	3
	8996	8999	3	9
			12	36
Stage 4	Top	Bottom	ft	holes
	9033	9035	2	6
	9049	9051	2	6
	9062	9064	2	6
	9076	9077	1	3
	9079	9081	2	6
	9093	9095	2	6
	9110	9111	1	3
	9145	9147	2	6
	9156	9158	2	6
	9176	9178	2	6
	9216	9217	1	3
			19	57
Stage 3	Top	Bottom	ft	holes
	9240	9242	2	6
	9257	9260	3	9
	9274	9275	1	3
	9290	9292	2	6
	9302	9304	2	6
	9323	9324	1	3
	9331	9332	1	3
	9372	9373	1	3
	9406	9407	1	3
	9436	9440	4	12
	9458	9459	1	3
	9477	9478	1	3
	9485	9486	1	3
			21	63
Stage 2	Top	Bottom	ft	holes
	9516	9517	1	3
	9527	9528	1	3
	9534	9537	3	9
	9581	9582	1	3
	9590	9591	1	3
	9628	9632	4	12
	9653	9655	2	6
	9666	9667	1	3
	9698	9699	1	3
	9720	9722	2	6
			17	51
Stage 1	Top	Bottom	ft	holes
	9734	9736	2	6
	9782	9786	4	12
	9817	9818	1	3
	9827	9828	1	3
	9885	9886	1	3
	9903	9905	2	6
	9985	9987	2	6
	9934	9936	2	6
			15	45

Stage 6	Top	Bottom	ft	holes
	8535	8538	3	9
	8562	8564	2	6
	8585	8587	2	6
	8648	8651	3	9
	8657	8660	3	9
	8678	8681	3	9
	8713	8715	2	6
	8718	8719	1	3
	8750	8752	2	6
			21	63
Stage 7	Top	Bottom	ft	holes
	8400	8403	3	9
	8427	8428	1	3
	8432	8433	1	3
	8439	8440	1	3
	8452	8454	2	6
	8459	8460	1	3
	8492	8494	2	6
			11	33
Stage 8	Top	Bottom	ft	holes
	8235	8237	2	6
	8247	8248	1	3
	8256	8258	2	6
	8269	8271	2	6
	8280	8282	2	6
	8296	8298	2	6
	8318	8319	1	3
	8328	8330	2	6
	8343	8345	2	6
	8356	8358	2	6
			18	54
Stage 9	Top	Bottom	ft	holes
	8061	8064	3	9
	8071	8072	1	3
	8094	8098	4	12
	8121	8125	4	12
	8168	8171	3	9
	8206	8208	2	6
			17	51
Stage 10	Top	Bottom	ft	holes
	7887	7888	1	3
	7918	7920	2	6
	7951	7952	1	3
	7969	7972	3	9
			7	21



## Directional Survey Certification

2948 I-70 Business Loop  
Grand Junction, CO 81504  
(970)-245-9447 Fax (970)-245-9454

<b>Operator</b>	<u>Gasco Energy</u>
<b>Well Name &amp; No.</b>	<u>Pappadakis 15-24-2-1E</u>
<b>County &amp; State</b>	<u>Uintah County, UT</u>
<b>SDI Job No.</b>	<u>421114DEF226423</u>
<b>Rig</b>	<u>Frontier 15</u>

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 0 feet to a measured depth of 10,029 feet is true and correct as determined from all available records.

A handwritten signature in blue ink, appearing to read 'Janie Collins', written over a horizontal line.

Signature

23-Feb-15

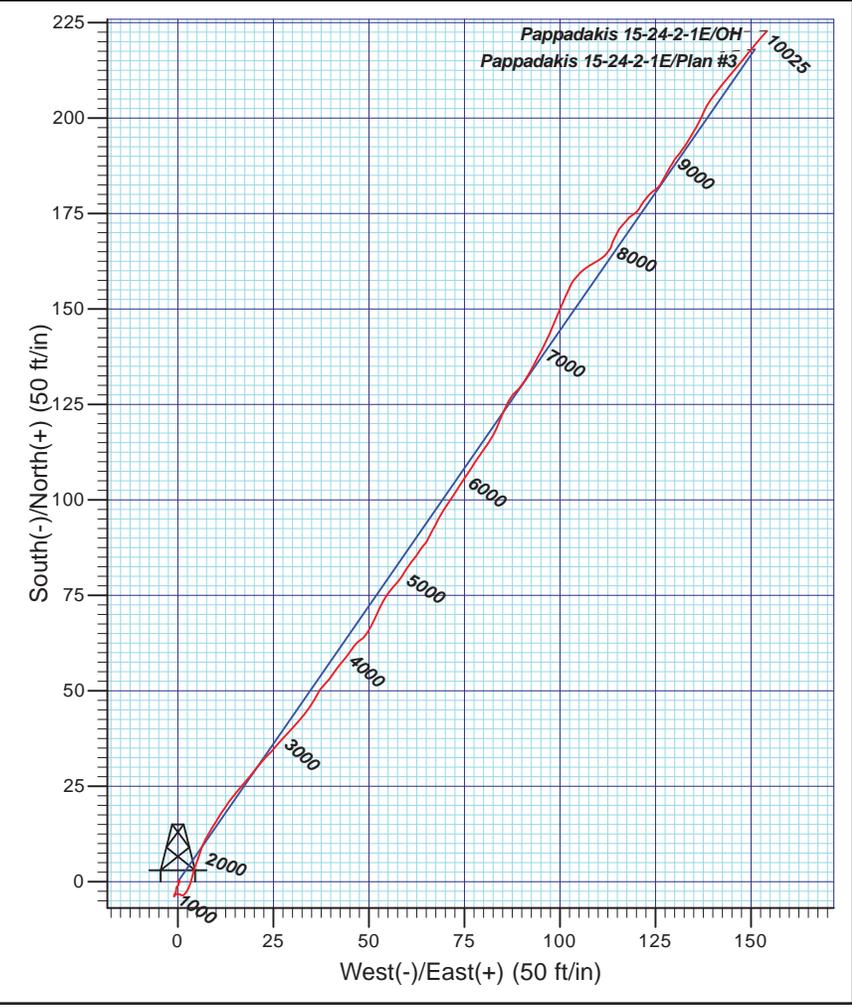
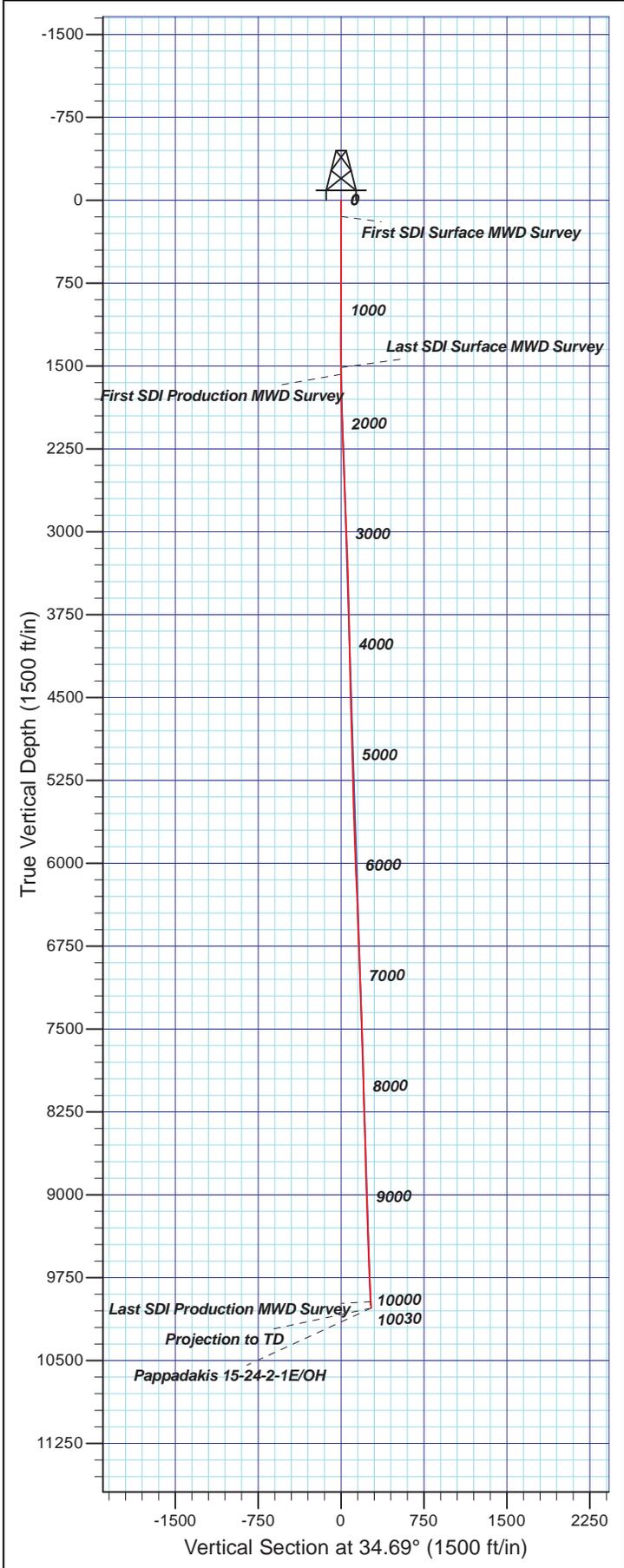
Date

### Janie Collins

Colorado District Well Planner  
Scientific Drilling International



Company: Gasco Energy  
 Project: Uintah County, UT NAD83  
 Site: Pappadakis Pad  
 Well: Pappadakis 15-24-2-1E  
 Wellbore: OH  
 Design: OH



<b>Well Details: Pappadakis 15-24-2-1E</b>				
+N/-S	+E/-W	TVD Reference: GL 5038' @ 5038.00ft		Ground Level: 5038.00
0.00	0.00	Northing	Easting	Latitude
		7278255.02	2106472.15	40° 17' 19.471 N
				109° 49' 45.167 W
				Slot
<b>REFERENCE INFORMATION</b>				
Co-ordinate (N/E) Reference: Well Pappadakis 15-24-2-1E, True North				
Vertical (TVD) Reference: GL 5038' @ 5038.00ft				
Section (VS) Reference: Slot - (0.00N, 0.00E)				
Measured Depth Reference: GL 5038' @ 5038.00ft				
Calculation Method: Minimum Curvature				
<b>PROJECT DETAILS: Uintah County, UT NAD83</b>				
Geodetic System: US State Plane 1983				
Datum: North American Datum 1983				
Ellipsoid: GRS 1980				
Zone: Utah Central Zone				
System Datum: Mean Sea Level				

Plan: OH  
 16:09, February 03 2015  
 Created By: Janie Collins

RECEIVED: May 20, 2015

## Survey Report - Geographic



<b>Company:</b>	Gasco Energy	<b>Local Co-ordinate Reference:</b>	Well Pappadakis 15-24-2-1E
<b>Project:</b>	Uintah County, UT NAD83	<b>TVD Reference:</b>	GL 5038' @ 5038.00ft
<b>Site:</b>	Pappadakis Pad	<b>MD Reference:</b>	GL 5038' @ 5038.00ft
<b>Well:</b>	Pappadakis 15-24-2-1E	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Grand Junction District

<b>Project</b>	Uintah County, UT NAD83		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		

<b>Site</b>	Pappadakis Pad				
<b>Site Position:</b>		<b>Northing:</b>	7,278,255.02 usft	<b>Latitude:</b>	40° 17' 19.471 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,106,472.15 usft	<b>Longitude:</b>	109° 49' 45.167 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	1.07 °

<b>Well</b>	Pappadakis 15-24-2-1E					
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	7,278,255.02 usft	<b>Latitude:</b>	40° 17' 19.471 N
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	2,106,472.15 usft	<b>Longitude:</b>	109° 49' 45.167 W
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	0.00 ft	<b>Ground Level:</b>	5,038.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2014	8/8/2014	10.97	65.95	52,017

<b>Design</b>	OH				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	34.69	

<b>Survey Program</b>	<b>Date</b>	2/3/2015			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
146.00	1,514.00	Survey #1 - Surface MWD (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	
1,576.00	10,030.00	Survey #2 - Production MWD Survey (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Map Northing (usft)</b>	<b>Map Easting (usft)</b>	<b>Latitude</b>	<b>Longitude</b>	
0.00	0.00	0.00	0.00	0.00	0.00	7,278,255.02	2,106,472.15	40° 17' 19.471 N	109° 49' 45.167 W	
146.00	0.18	17.21	146.00	0.22	0.07	7,278,255.24	2,106,472.21	40° 17' 19.473 N	109° 49' 45.166 W	
<b>First SDI Surface MWD Survey</b>										
176.00	0.34	87.97	176.00	0.27	0.17	7,278,255.29	2,106,472.31	40° 17' 19.474 N	109° 49' 45.165 W	
208.00	0.09	162.41	208.00	0.25	0.27	7,278,255.27	2,106,472.42	40° 17' 19.474 N	109° 49' 45.163 W	
238.00	0.17	100.14	238.00	0.22	0.32	7,278,255.25	2,106,472.47	40° 17' 19.473 N	109° 49' 45.163 W	
268.00	0.12	355.18	268.00	0.24	0.37	7,278,255.27	2,106,472.51	40° 17' 19.474 N	109° 49' 45.162 W	
299.00	0.35	238.17	299.00	0.22	0.28	7,278,255.25	2,106,472.43	40° 17' 19.473 N	109° 49' 45.163 W	
331.00	0.24	86.60	331.00	0.17	0.27	7,278,255.20	2,106,472.41	40° 17' 19.473 N	109° 49' 45.163 W	
362.00	0.13	126.90	362.00	0.16	0.36	7,278,255.19	2,106,472.50	40° 17' 19.473 N	109° 49' 45.162 W	
393.00	0.14	226.74	393.00	0.11	0.36	7,278,255.14	2,106,472.51	40° 17' 19.472 N	109° 49' 45.162 W	

## Survey Report - Geographic



<b>Company:</b>	Gasco Energy	<b>Local Co-ordinate Reference:</b>	Well Pappadakis 15-24-2-1E
<b>Project:</b>	Uintah County, UT NAD83	<b>TVD Reference:</b>	GL 5038' @ 5038.00ft
<b>Site:</b>	Pappadakis Pad	<b>MD Reference:</b>	GL 5038' @ 5038.00ft
<b>Well:</b>	Pappadakis 15-24-2-1E	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Grand Junction District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
424.00	0.09	111.60	424.00	0.08	0.35	7,278,255.11	2,106,472.50	40° 17' 19.472 N	109° 49' 45.162 W	
455.00	0.09	288.00	455.00	0.07	0.35	7,278,255.10	2,106,472.50	40° 17' 19.472 N	109° 49' 45.162 W	
486.00	0.09	52.10	486.00	0.10	0.35	7,278,255.13	2,106,472.50	40° 17' 19.472 N	109° 49' 45.162 W	
517.00	0.09	129.18	517.00	0.10	0.39	7,278,255.13	2,106,472.53	40° 17' 19.472 N	109° 49' 45.162 W	
547.00	0.18	35.32	547.00	0.12	0.43	7,278,255.15	2,106,472.58	40° 17' 19.472 N	109° 49' 45.161 W	
577.00	0.09	165.48	577.00	0.14	0.47	7,278,255.17	2,106,472.61	40° 17' 19.472 N	109° 49' 45.161 W	
609.00	0.18	218.57	609.00	0.07	0.44	7,278,255.10	2,106,472.59	40° 17' 19.472 N	109° 49' 45.161 W	
640.00	0.26	169.88	640.00	-0.04	0.42	7,278,255.00	2,106,472.57	40° 17' 19.471 N	109° 49' 45.161 W	
671.00	0.44	212.33	671.00	-0.21	0.37	7,278,254.82	2,106,472.52	40° 17' 19.469 N	109° 49' 45.162 W	
702.00	0.44	237.55	702.00	-0.37	0.21	7,278,254.66	2,106,472.36	40° 17' 19.468 N	109° 49' 45.164 W	
731.00	0.37	159.58	731.00	-0.52	0.15	7,278,254.51	2,106,472.30	40° 17' 19.466 N	109° 49' 45.165 W	
763.00	0.62	172.69	762.99	-0.79	0.21	7,278,254.24	2,106,472.37	40° 17' 19.463 N	109° 49' 45.164 W	
794.00	0.62	233.42	793.99	-1.05	0.09	7,278,253.97	2,106,472.26	40° 17' 19.461 N	109° 49' 45.166 W	
825.00	0.54	243.10	824.99	-1.22	-0.17	7,278,253.80	2,106,472.00	40° 17' 19.459 N	109° 49' 45.169 W	
857.00	0.70	187.28	856.99	-1.48	-0.33	7,278,253.54	2,106,471.84	40° 17' 19.457 N	109° 49' 45.171 W	
886.00	0.24	214.23	885.99	-1.71	-0.39	7,278,253.31	2,106,471.79	40° 17' 19.454 N	109° 49' 45.172 W	
918.00	0.59	177.36	917.99	-1.93	-0.42	7,278,253.09	2,106,471.76	40° 17' 19.452 N	109° 49' 45.172 W	
949.00	0.62	179.72	948.99	-2.25	-0.41	7,278,252.76	2,106,471.78	40° 17' 19.449 N	109° 49' 45.172 W	
992.00	0.35	213.03	991.99	-2.60	-0.48	7,278,252.42	2,106,471.71	40° 17' 19.445 N	109° 49' 45.173 W	
1,023.00	0.50	211.74	1,022.98	-2.79	-0.60	7,278,252.22	2,106,471.60	40° 17' 19.444 N	109° 49' 45.175 W	
1,070.00	0.79	197.65	1,069.98	-3.27	-0.81	7,278,251.73	2,106,471.40	40° 17' 19.439 N	109° 49' 45.177 W	
1,100.00	0.47	170.35	1,099.98	-3.59	-0.85	7,278,251.42	2,106,471.36	40° 17' 19.436 N	109° 49' 45.178 W	
1,132.00	0.18	210.31	1,131.98	-3.77	-0.86	7,278,251.24	2,106,471.36	40° 17' 19.434 N	109° 49' 45.178 W	
1,165.00	0.09	231.93	1,164.98	-3.83	-0.90	7,278,251.18	2,106,471.32	40° 17' 19.433 N	109° 49' 45.178 W	
1,195.00	0.26	249.86	1,194.98	-3.86	-0.98	7,278,251.14	2,106,471.24	40° 17' 19.433 N	109° 49' 45.180 W	
1,227.00	0.27	0.25	1,226.98	-3.81	-1.05	7,278,251.19	2,106,471.17	40° 17' 19.433 N	109° 49' 45.180 W	
1,259.00	0.46	52.00	1,258.98	-3.66	-0.95	7,278,251.35	2,106,471.27	40° 17' 19.435 N	109° 49' 45.179 W	
1,290.00	0.12	300.01	1,289.98	-3.57	-0.88	7,278,251.44	2,106,471.33	40° 17' 19.436 N	109° 49' 45.178 W	
1,322.00	0.53	58.69	1,321.98	-3.47	-0.78	7,278,251.54	2,106,471.43	40° 17' 19.437 N	109° 49' 45.177 W	
1,356.00	0.44	70.82	1,355.98	-3.35	-0.53	7,278,251.67	2,106,471.68	40° 17' 19.438 N	109° 49' 45.174 W	
1,385.00	0.17	51.81	1,384.98	-3.28	-0.39	7,278,251.73	2,106,471.82	40° 17' 19.439 N	109° 49' 45.172 W	
1,418.00	0.18	323.51	1,417.98	-3.21	-0.38	7,278,251.80	2,106,471.83	40° 17' 19.439 N	109° 49' 45.172 W	
1,450.00	0.15	104.96	1,449.98	-3.18	-0.37	7,278,251.83	2,106,471.84	40° 17' 19.440 N	109° 49' 45.172 W	
1,480.00	0.44	87.35	1,479.97	-3.19	-0.22	7,278,251.83	2,106,471.99	40° 17' 19.440 N	109° 49' 45.170 W	
1,514.00	0.53	88.75	1,513.97	-3.18	0.07	7,278,251.85	2,106,472.28	40° 17' 19.440 N	109° 49' 45.166 W	
<b>Last SDI Surface MWD Survey</b>										
1,576.00	0.80	123.55	1,575.97	-3.41	0.72	7,278,251.63	2,106,472.93	40° 17' 19.437 N	109° 49' 45.158 W	
<b>First SDI Production MWD Survey</b>										
1,610.00	0.73	113.03	1,609.97	-3.63	1.12	7,278,251.42	2,106,473.33	40° 17' 19.435 N	109° 49' 45.152 W	
1,640.00	0.88	60.36	1,639.96	-3.59	1.49	7,278,251.46	2,106,473.71	40° 17' 19.436 N	109° 49' 45.148 W	
1,703.00	1.32	28.70	1,702.95	-2.71	2.26	7,278,252.35	2,106,474.46	40° 17' 19.444 N	109° 49' 45.138 W	
1,734.00	1.67	22.75	1,733.94	-1.98	2.61	7,278,253.09	2,106,474.79	40° 17' 19.452 N	109° 49' 45.133 W	
1,766.00	2.11	27.58	1,765.92	-1.03	3.06	7,278,254.05	2,106,475.23	40° 17' 19.461 N	109° 49' 45.127 W	
1,797.00	2.20	13.17	1,796.90	0.05	3.46	7,278,255.14	2,106,475.61	40° 17' 19.472 N	109° 49' 45.122 W	
1,829.00	2.11	12.38	1,828.88	1.23	3.73	7,278,256.32	2,106,475.85	40° 17' 19.483 N	109° 49' 45.119 W	
1,893.00	2.11	19.41	1,892.84	3.49	4.37	7,278,258.59	2,106,476.45	40° 17' 19.506 N	109° 49' 45.110 W	
1,924.00	2.37	19.67	1,923.81	4.63	4.78	7,278,259.74	2,106,476.84	40° 17' 19.517 N	109° 49' 45.105 W	
1,956.00	2.20	20.11	1,955.79	5.83	5.21	7,278,260.95	2,106,477.25	40° 17' 19.529 N	109° 49' 45.100 W	
2,020.00	1.93	16.95	2,019.75	8.02	5.95	7,278,263.15	2,106,477.94	40° 17' 19.550 N	109° 49' 45.090 W	
2,051.00	2.20	23.27	2,050.73	9.06	6.33	7,278,264.20	2,106,478.31	40° 17' 19.561 N	109° 49' 45.085 W	
2,083.00	2.11	24.86	2,082.70	10.16	6.82	7,278,265.31	2,106,478.78	40° 17' 19.572 N	109° 49' 45.079 W	
2,115.00	2.11	27.41	2,114.68	11.22	7.34	7,278,266.38	2,106,479.28	40° 17' 19.582 N	109° 49' 45.072 W	
2,147.00	2.02	29.43	2,146.66	12.23	7.89	7,278,267.40	2,106,479.81	40° 17' 19.592 N	109° 49' 45.065 W	
2,178.00	1.76	29.34	2,177.64	13.12	8.39	7,278,268.30	2,106,480.29	40° 17' 19.601 N	109° 49' 45.058 W	
2,242.00	2.02	32.85	2,241.61	14.93	9.49	7,278,270.13	2,106,481.35	40° 17' 19.619 N	109° 49' 45.044 W	

## Survey Report - Geographic



<b>Company:</b>	Gasco Energy	<b>Local Co-ordinate Reference:</b>	Well Pappadakis 15-24-2-1E
<b>Project:</b>	Uintah County, UT NAD83	<b>TVD Reference:</b>	GL 5038' @ 5038.00ft
<b>Site:</b>	Pappadakis Pad	<b>MD Reference:</b>	GL 5038' @ 5038.00ft
<b>Well:</b>	Pappadakis 15-24-2-1E	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Grand Junction District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
2,274.00	2.20	31.18	2,273.59	15.93	10.11	7,278,271.14	2,106,481.96	40° 17' 19.629 N	109° 49' 45.036 W	
2,305.00	2.11	31.54	2,304.57	16.92	10.72	7,278,272.14	2,106,482.55	40° 17' 19.638 N	109° 49' 45.028 W	
2,337.00	1.93	32.59	2,336.55	17.88	11.32	7,278,273.11	2,106,483.13	40° 17' 19.648 N	109° 49' 45.021 W	
2,400.00	2.29	35.40	2,399.50	19.80	12.62	7,278,275.05	2,106,484.39	40° 17' 19.667 N	109° 49' 45.004 W	
2,432.00	1.93	34.00	2,431.48	20.77	13.29	7,278,276.03	2,106,485.05	40° 17' 19.676 N	109° 49' 44.995 W	
2,464.00	2.29	39.53	2,463.46	21.71	14.00	7,278,276.99	2,106,485.74	40° 17' 19.686 N	109° 49' 44.986 W	
2,527.00	2.29	37.07	2,526.41	23.68	15.56	7,278,278.99	2,106,487.26	40° 17' 19.705 N	109° 49' 44.966 W	
2,591.00	2.20	43.23	2,590.36	25.60	17.17	7,278,280.94	2,106,488.83	40° 17' 19.724 N	109° 49' 44.945 W	
2,623.00	2.29	40.50	2,622.34	26.53	18.00	7,278,281.88	2,106,489.65	40° 17' 19.733 N	109° 49' 44.934 W	
2,654.00	2.29	36.72	2,653.31	27.50	18.78	7,278,282.87	2,106,490.41	40° 17' 19.743 N	109° 49' 44.924 W	
2,718.00	2.02	40.94	2,717.27	29.37	20.28	7,278,284.77	2,106,491.88	40° 17' 19.761 N	109° 49' 44.905 W	
2,749.00	2.29	35.32	2,748.24	30.29	21.00	7,278,285.70	2,106,492.57	40° 17' 19.771 N	109° 49' 44.896 W	
2,813.00	2.46	46.39	2,812.19	32.28	22.73	7,278,287.72	2,106,494.27	40° 17' 19.790 N	109° 49' 44.873 W	
2,876.00	2.46	42.08	2,875.13	34.22	24.61	7,278,289.70	2,106,496.12	40° 17' 19.809 N	109° 49' 44.849 W	
2,940.00	2.46	40.33	2,939.07	36.29	26.42	7,278,291.80	2,106,497.89	40° 17' 19.830 N	109° 49' 44.826 W	
3,003.00	2.46	42.00	3,002.01	38.32	28.20	7,278,293.86	2,106,499.63	40° 17' 19.850 N	109° 49' 44.803 W	
3,067.00	2.11	42.87	3,065.96	40.21	29.92	7,278,295.78	2,106,501.32	40° 17' 19.868 N	109° 49' 44.781 W	
3,130.00	1.93	41.03	3,128.92	41.86	31.41	7,278,297.46	2,106,502.77	40° 17' 19.885 N	109° 49' 44.761 W	
3,194.00	1.99	41.30	3,192.89	43.50	32.85	7,278,299.13	2,106,504.18	40° 17' 19.901 N	109° 49' 44.743 W	
3,257.00	2.02	31.80	3,255.85	45.27	34.16	7,278,300.92	2,106,505.45	40° 17' 19.919 N	109° 49' 44.726 W	
3,323.00	1.85	35.14	3,321.81	47.13	35.38	7,278,302.80	2,106,506.65	40° 17' 19.937 N	109° 49' 44.710 W	
3,384.00	1.58	24.42	3,382.78	48.70	36.30	7,278,304.39	2,106,507.53	40° 17' 19.952 N	109° 49' 44.698 W	
3,448.00	1.67	35.49	3,446.76	50.26	37.20	7,278,305.97	2,106,508.41	40° 17' 19.968 N	109° 49' 44.687 W	
3,511.00	1.85	44.81	3,509.73	51.73	38.45	7,278,307.46	2,106,509.63	40° 17' 19.982 N	109° 49' 44.671 W	
3,575.00	1.41	39.62	3,573.70	53.07	39.68	7,278,308.83	2,106,510.83	40° 17' 19.996 N	109° 49' 44.655 W	
3,638.00	1.58	29.87	3,636.68	54.42	40.61	7,278,310.19	2,106,511.74	40° 17' 20.009 N	109° 49' 44.643 W	
3,702.00	1.49	41.29	3,700.66	55.81	41.60	7,278,311.60	2,106,512.70	40° 17' 20.023 N	109° 49' 44.630 W	
3,765.00	1.23	35.49	3,763.64	56.98	42.53	7,278,312.78	2,106,513.61	40° 17' 20.034 N	109° 49' 44.618 W	
3,829.00	0.88	43.31	3,827.63	57.89	43.27	7,278,313.72	2,106,514.33	40° 17' 20.043 N	109° 49' 44.608 W	
3,892.00	0.88	33.03	3,890.62	58.65	43.86	7,278,314.48	2,106,514.91	40° 17' 20.051 N	109° 49' 44.601 W	
3,955.00	0.97	38.83	3,953.61	59.47	44.46	7,278,315.32	2,106,515.49	40° 17' 20.059 N	109° 49' 44.593 W	
4,019.00	0.97	41.64	4,017.60	60.30	45.16	7,278,316.16	2,106,516.18	40° 17' 20.067 N	109° 49' 44.584 W	
4,082.00	1.23	26.70	4,080.59	61.30	45.82	7,278,317.17	2,106,516.81	40° 17' 20.077 N	109° 49' 44.575 W	
4,146.00	1.32	49.20	4,144.58	62.40	46.69	7,278,318.28	2,106,517.66	40° 17' 20.088 N	109° 49' 44.564 W	
4,209.00	0.79	55.18	4,207.57	63.12	47.59	7,278,319.02	2,106,518.55	40° 17' 20.095 N	109° 49' 44.553 W	
4,273.00	1.06	51.58	4,271.56	63.74	48.42	7,278,319.66	2,106,519.37	40° 17' 20.101 N	109° 49' 44.542 W	
4,336.00	1.58	30.22	4,334.54	64.85	49.31	7,278,320.78	2,106,520.24	40° 17' 20.112 N	109° 49' 44.530 W	
4,400.00	2.11	30.83	4,398.51	66.63	50.36	7,278,322.58	2,106,521.25	40° 17' 20.130 N	109° 49' 44.517 W	
4,463.00	1.41	29.51	4,461.48	68.30	51.34	7,278,324.27	2,106,522.20	40° 17' 20.146 N	109° 49' 44.504 W	
4,527.00	1.93	19.76	4,525.45	70.00	52.09	7,278,325.98	2,106,522.92	40° 17' 20.163 N	109° 49' 44.495 W	
4,590.00	1.49	26.35	4,588.42	71.73	52.81	7,278,327.73	2,106,523.61	40° 17' 20.180 N	109° 49' 44.485 W	
4,653.00	1.41	32.15	4,651.40	73.12	53.59	7,278,329.13	2,106,524.36	40° 17' 20.194 N	109° 49' 44.475 W	
4,717.00	1.49	30.66	4,715.38	74.50	54.43	7,278,330.53	2,106,525.18	40° 17' 20.207 N	109° 49' 44.464 W	
4,780.00	1.49	35.84	4,778.36	75.87	55.33	7,278,331.91	2,106,526.05	40° 17' 20.221 N	109° 49' 44.453 W	
4,844.00	1.41	41.73	4,842.34	77.13	56.34	7,278,333.19	2,106,527.04	40° 17' 20.233 N	109° 49' 44.440 W	
4,907.00	1.76	43.49	4,905.32	78.41	57.52	7,278,334.50	2,106,528.19	40° 17' 20.246 N	109° 49' 44.424 W	
4,971.00	1.93	29.69	4,969.28	80.06	58.73	7,278,336.17	2,106,529.37	40° 17' 20.262 N	109° 49' 44.409 W	
5,034.00	1.93	32.68	5,032.25	81.88	59.83	7,278,338.00	2,106,530.44	40° 17' 20.280 N	109° 49' 44.395 W	
5,098.00	2.11	36.63	5,096.21	83.73	61.11	7,278,339.88	2,106,531.69	40° 17' 20.299 N	109° 49' 44.378 W	
5,162.00	1.67	40.06	5,160.17	85.39	62.42	7,278,341.56	2,106,532.96	40° 17' 20.315 N	109° 49' 44.361 W	
5,225.00	1.32	26.44	5,223.15	86.74	63.33	7,278,342.93	2,106,533.85	40° 17' 20.328 N	109° 49' 44.350 W	
5,289.00	1.14	43.31	5,287.14	87.86	64.10	7,278,344.07	2,106,534.59	40° 17' 20.339 N	109° 49' 44.340 W	
5,352.00	0.79	39.09	5,350.13	88.66	64.80	7,278,344.87	2,106,535.28	40° 17' 20.347 N	109° 49' 44.331 W	
5,416.00	0.70	33.29	5,414.12	89.33	65.29	7,278,345.55	2,106,535.76	40° 17' 20.354 N	109° 49' 44.324 W	
5,479.00	1.41	22.04	5,477.11	90.37	65.79	7,278,346.60	2,106,536.24	40° 17' 20.364 N	109° 49' 44.318 W	

## Survey Report - Geographic



<b>Company:</b>	Gasco Energy	<b>Local Co-ordinate Reference:</b>	Well Pappadakis 15-24-2-1E
<b>Project:</b>	Uintah County, UT NAD83	<b>TVD Reference:</b>	GL 5038' @ 5038.00ft
<b>Site:</b>	Pappadakis Pad	<b>MD Reference:</b>	GL 5038' @ 5038.00ft
<b>Well:</b>	Pappadakis 15-24-2-1E	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Grand Junction District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,543.00	1.67	32.33	5,541.09	91.88	66.59	7,278,348.13	2,106,537.01	40° 17' 20.379 N	109° 49' 44.307 W	
5,606.00	1.92	26.14	5,604.06	93.61	67.54	7,278,349.88	2,106,537.93	40° 17' 20.396 N	109° 49' 44.295 W	
5,701.00	2.11	29.16	5,699.00	96.56	69.10	7,278,352.86	2,106,539.43	40° 17' 20.425 N	109° 49' 44.275 W	
5,733.00	2.29	34.35	5,730.98	97.61	69.75	7,278,353.91	2,106,540.06	40° 17' 20.436 N	109° 49' 44.267 W	
5,765.00	2.64	31.36	5,762.95	98.76	70.49	7,278,355.08	2,106,540.78	40° 17' 20.447 N	109° 49' 44.257 W	
5,796.00	1.85	33.91	5,793.92	99.79	71.14	7,278,356.12	2,106,541.41	40° 17' 20.457 N	109° 49' 44.249 W	
5,828.00	2.20	38.92	5,825.90	100.69	71.81	7,278,357.04	2,106,542.07	40° 17' 20.466 N	109° 49' 44.240 W	
5,860.00	1.93	30.83	5,857.88	101.63	72.48	7,278,357.99	2,106,542.71	40° 17' 20.476 N	109° 49' 44.231 W	
5,892.00	2.20	28.64	5,889.86	102.64	73.05	7,278,359.01	2,106,543.27	40° 17' 20.485 N	109° 49' 44.224 W	
5,923.00	2.20	35.32	5,920.84	103.64	73.68	7,278,360.02	2,106,543.88	40° 17' 20.495 N	109° 49' 44.216 W	
5,987.00	2.73	33.47	5,984.78	105.92	75.23	7,278,362.33	2,106,545.38	40° 17' 20.518 N	109° 49' 44.196 W	
6,051.00	2.37	33.91	6,048.71	108.29	76.81	7,278,364.73	2,106,546.92	40° 17' 20.541 N	109° 49' 44.176 W	
6,114.00	2.73	32.06	6,111.65	110.64	78.33	7,278,367.11	2,106,548.40	40° 17' 20.565 N	109° 49' 44.156 W	
6,177.00	2.64	36.46	6,174.58	113.08	79.99	7,278,369.58	2,106,550.01	40° 17' 20.589 N	109° 49' 44.135 W	
6,241.00	2.37	32.94	6,238.52	115.37	81.58	7,278,371.90	2,106,551.56	40° 17' 20.611 N	109° 49' 44.114 W	
6,272.00	2.64	31.62	6,269.49	116.52	82.31	7,278,373.06	2,106,552.26	40° 17' 20.623 N	109° 49' 44.105 W	
6,336.00	2.29	20.99	6,333.43	118.97	83.54	7,278,375.53	2,106,553.45	40° 17' 20.647 N	109° 49' 44.089 W	
6,368.00	2.37	20.81	6,365.41	120.18	84.00	7,278,376.76	2,106,553.89	40° 17' 20.659 N	109° 49' 44.083 W	
6,431.00	1.85	24.24	6,428.36	122.33	84.88	7,278,378.92	2,106,554.73	40° 17' 20.680 N	109° 49' 44.071 W	
6,494.00	1.67	25.03	6,491.33	124.09	85.69	7,278,380.69	2,106,555.50	40° 17' 20.697 N	109° 49' 44.061 W	
6,558.00	2.11	27.49	6,555.30	125.98	86.63	7,278,382.60	2,106,556.40	40° 17' 20.716 N	109° 49' 44.049 W	
6,621.00	1.67	44.02	6,618.26	127.67	87.80	7,278,384.31	2,106,557.55	40° 17' 20.733 N	109° 49' 44.034 W	
6,685.00	1.85	47.44	6,682.23	129.04	89.21	7,278,385.70	2,106,558.93	40° 17' 20.746 N	109° 49' 44.016 W	
6,749.00	2.46	29.16	6,746.19	130.94	90.64	7,278,387.63	2,106,560.32	40° 17' 20.765 N	109° 49' 43.997 W	
6,812.00	2.02	32.59	6,809.14	133.05	91.89	7,278,389.77	2,106,561.54	40° 17' 20.786 N	109° 49' 43.981 W	
6,876.00	2.11	26.79	6,873.10	135.05	93.03	7,278,391.79	2,106,562.64	40° 17' 20.806 N	109° 49' 43.966 W	
6,939.00	2.55	26.44	6,936.05	137.34	94.18	7,278,394.10	2,106,563.75	40° 17' 20.828 N	109° 49' 43.951 W	
7,003.00	2.73	29.43	6,999.98	139.95	95.56	7,278,396.73	2,106,565.08	40° 17' 20.854 N	109° 49' 43.934 W	
7,065.00	2.99	24.07	7,061.90	142.71	96.95	7,278,399.52	2,106,566.41	40° 17' 20.881 N	109° 49' 43.916 W	
7,129.00	2.64	21.96	7,125.83	145.60	98.18	7,278,402.43	2,106,567.59	40° 17' 20.910 N	109° 49' 43.900 W	
7,192.00	2.11	23.27	7,188.77	148.01	99.18	7,278,404.86	2,106,568.55	40° 17' 20.934 N	109° 49' 43.887 W	
7,256.00	1.93	24.07	7,252.73	150.08	100.09	7,278,406.94	2,106,569.41	40° 17' 20.954 N	109° 49' 43.875 W	
7,319.00	1.67	22.57	7,315.70	151.89	100.87	7,278,408.77	2,106,570.16	40° 17' 20.972 N	109° 49' 43.865 W	
7,383.00	1.41	25.74	7,379.68	153.46	101.57	7,278,410.36	2,106,570.83	40° 17' 20.988 N	109° 49' 43.856 W	
7,447.00	1.58	25.03	7,443.66	154.97	102.29	7,278,411.88	2,106,571.52	40° 17' 21.003 N	109° 49' 43.847 W	
7,510.00	1.49	23.45	7,506.63	156.51	102.98	7,278,413.43	2,106,572.19	40° 17' 21.018 N	109° 49' 43.838 W	
7,542.00	2.11	36.55	7,538.62	157.37	103.50	7,278,414.29	2,106,572.69	40° 17' 21.026 N	109° 49' 43.831 W	
7,602.00	2.51	44.73	7,598.57	159.19	105.08	7,278,416.14	2,106,574.23	40° 17' 21.044 N	109° 49' 43.811 W	
7,634.00	2.24	48.95	7,630.54	160.09	106.04	7,278,417.07	2,106,575.18	40° 17' 21.053 N	109° 49' 43.798 W	
7,665.00	1.98	54.09	7,661.52	160.81	106.93	7,278,417.80	2,106,576.06	40° 17' 21.060 N	109° 49' 43.787 W	
7,697.00	1.91	52.72	7,693.50	161.45	107.81	7,278,418.46	2,106,576.92	40° 17' 21.067 N	109° 49' 43.776 W	
7,761.00	1.91	68.51	7,757.47	162.49	109.65	7,278,419.53	2,106,578.74	40° 17' 21.077 N	109° 49' 43.752 W	
7,792.00	1.80	53.28	7,788.45	162.97	110.52	7,278,420.03	2,106,579.60	40° 17' 21.082 N	109° 49' 43.741 W	
7,824.00	1.58	50.44	7,820.44	163.55	111.26	7,278,420.62	2,106,580.33	40° 17' 21.087 N	109° 49' 43.731 W	
7,856.00	1.47	41.22	7,852.42	164.14	111.87	7,278,421.23	2,106,580.93	40° 17' 21.093 N	109° 49' 43.723 W	
7,888.00	1.36	40.13	7,884.42	164.74	112.39	7,278,421.83	2,106,581.44	40° 17' 21.099 N	109° 49' 43.716 W	
7,919.00	1.26	32.47	7,915.41	165.31	112.81	7,278,422.41	2,106,581.85	40° 17' 21.105 N	109° 49' 43.711 W	
7,951.00	0.67	39.41	7,947.40	165.75	113.11	7,278,422.86	2,106,582.15	40° 17' 21.109 N	109° 49' 43.707 W	
7,983.00	0.70	26.00	7,979.40	166.07	113.32	7,278,423.18	2,106,582.34	40° 17' 21.112 N	109° 49' 43.704 W	
8,015.00	0.61	19.74	8,011.40	166.41	113.46	7,278,423.52	2,106,582.48	40° 17' 21.116 N	109° 49' 43.703 W	
8,047.00	1.16	9.09	8,043.39	166.89	113.57	7,278,424.00	2,106,582.58	40° 17' 21.120 N	109° 49' 43.701 W	
8,078.00	1.62	25.37	8,074.38	167.59	113.81	7,278,424.71	2,106,582.81	40° 17' 21.127 N	109° 49' 43.698 W	
8,110.00	2.32	27.57	8,106.37	168.58	114.30	7,278,425.70	2,106,583.28	40° 17' 21.137 N	109° 49' 43.692 W	
8,142.00	2.62	25.32	8,138.34	169.81	114.91	7,278,426.95	2,106,583.87	40° 17' 21.149 N	109° 49' 43.684 W	
8,205.00	1.92	45.66	8,201.29	171.85	116.28	7,278,429.02	2,106,585.20	40° 17' 21.169 N	109° 49' 43.666 W	

## Survey Report - Geographic



<b>Company:</b>	Gasco Energy	<b>Local Co-ordinate Reference:</b>	Well Pappadakis 15-24-2-1E
<b>Project:</b>	Uintah County, UT NAD83	<b>TVD Reference:</b>	GL 5038' @ 5038.00ft
<b>Site:</b>	Pappadakis Pad	<b>MD Reference:</b>	GL 5038' @ 5038.00ft
<b>Well:</b>	Pappadakis 15-24-2-1E	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Grand Junction District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
8,269.00	1.76	35.27	8,265.25	173.40	117.62	7,278,430.59	2,106,586.51	40° 17' 21.185 N	109° 49' 43.649 W	
8,300.00	1.64	51.54	8,296.24	174.07	118.24	7,278,431.27	2,106,587.12	40° 17' 21.191 N	109° 49' 43.641 W	
8,364.00	1.39	58.41	8,360.22	175.04	119.62	7,278,432.27	2,106,588.48	40° 17' 21.201 N	109° 49' 43.623 W	
8,396.00	1.61	40.68	8,392.21	175.59	120.24	7,278,432.83	2,106,589.09	40° 17' 21.206 N	109° 49' 43.615 W	
8,427.00	1.66	30.29	8,423.20	176.31	120.75	7,278,433.55	2,106,589.59	40° 17' 21.214 N	109° 49' 43.608 W	
8,459.00	1.73	27.97	8,455.18	177.13	121.21	7,278,434.39	2,106,590.03	40° 17' 21.222 N	109° 49' 43.603 W	
8,491.00	1.78	38.73	8,487.17	177.95	121.75	7,278,435.21	2,106,590.55	40° 17' 21.230 N	109° 49' 43.596 W	
8,522.00	1.88	40.65	8,518.15	178.71	122.38	7,278,435.99	2,106,591.17	40° 17' 21.237 N	109° 49' 43.587 W	
8,554.00	1.77	38.77	8,550.13	179.49	123.04	7,278,436.78	2,106,591.81	40° 17' 21.245 N	109° 49' 43.579 W	
8,586.00	1.15	40.38	8,582.12	180.12	123.55	7,278,437.42	2,106,592.31	40° 17' 21.251 N	109° 49' 43.572 W	
8,618.00	1.33	50.67	8,614.12	180.60	124.05	7,278,437.91	2,106,592.80	40° 17' 21.256 N	109° 49' 43.566 W	
8,649.00	1.31	64.99	8,645.11	180.98	124.65	7,278,438.30	2,106,593.39	40° 17' 21.260 N	109° 49' 43.558 W	
8,681.00	1.45	42.14	8,677.10	181.43	125.25	7,278,438.77	2,106,593.99	40° 17' 21.264 N	109° 49' 43.550 W	
8,713.00	1.18	48.80	8,709.09	181.95	125.77	7,278,439.29	2,106,594.50	40° 17' 21.269 N	109° 49' 43.544 W	
8,745.00	1.87	32.89	8,741.08	182.61	126.30	7,278,439.96	2,106,595.02	40° 17' 21.276 N	109° 49' 43.537 W	
8,776.00	1.67	24.45	8,772.06	183.44	126.76	7,278,440.80	2,106,595.46	40° 17' 21.284 N	109° 49' 43.531 W	
8,808.00	2.08	33.82	8,804.05	184.35	127.28	7,278,441.72	2,106,595.96	40° 17' 21.293 N	109° 49' 43.524 W	
8,872.00	2.09	22.55	8,868.01	186.39	128.37	7,278,443.78	2,106,597.02	40° 17' 21.313 N	109° 49' 43.510 W	
8,903.00	1.70	41.01	8,898.99	187.26	128.89	7,278,444.66	2,106,597.52	40° 17' 21.322 N	109° 49' 43.503 W	
8,935.00	1.91	25.22	8,930.97	188.10	129.43	7,278,445.51	2,106,598.04	40° 17' 21.330 N	109° 49' 43.496 W	
8,967.00	2.09	34.97	8,962.95	189.06	129.99	7,278,446.48	2,106,598.59	40° 17' 21.340 N	109° 49' 43.489 W	
8,999.00	2.08	38.75	8,994.93	189.99	130.69	7,278,447.42	2,106,599.27	40° 17' 21.349 N	109° 49' 43.480 W	
9,030.00	2.11	38.39	9,025.91	190.88	131.40	7,278,448.32	2,106,599.96	40° 17' 21.358 N	109° 49' 43.471 W	
9,062.00	1.79	32.84	9,057.89	191.76	132.03	7,278,449.22	2,106,600.58	40° 17' 21.366 N	109° 49' 43.463 W	
9,094.00	1.67	44.69	9,089.88	192.51	132.63	7,278,449.98	2,106,601.16	40° 17' 21.374 N	109° 49' 43.455 W	
9,157.00	1.97	22.62	9,152.85	194.17	133.69	7,278,451.65	2,106,602.19	40° 17' 21.390 N	109° 49' 43.441 W	
9,189.00	2.12	30.48	9,184.83	195.18	134.21	7,278,452.68	2,106,602.68	40° 17' 21.400 N	109° 49' 43.435 W	
9,253.00	1.88	32.88	9,248.79	197.09	135.38	7,278,454.60	2,106,603.82	40° 17' 21.419 N	109° 49' 43.420 W	
9,284.00	1.79	27.13	9,279.77	197.94	135.87	7,278,455.47	2,106,604.30	40° 17' 21.427 N	109° 49' 43.413 W	
9,316.00	2.12	25.86	9,311.75	198.92	136.36	7,278,456.46	2,106,604.77	40° 17' 21.437 N	109° 49' 43.407 W	
9,348.00	1.91	29.67	9,343.73	199.92	136.88	7,278,457.46	2,106,605.27	40° 17' 21.447 N	109° 49' 43.400 W	
9,380.00	1.81	21.72	9,375.72	200.85	137.33	7,278,458.40	2,106,605.70	40° 17' 21.456 N	109° 49' 43.394 W	
9,411.00	1.61	21.87	9,406.70	201.71	137.68	7,278,459.27	2,106,606.03	40° 17' 21.465 N	109° 49' 43.390 W	
9,475.00	1.34	34.39	9,470.68	203.16	138.43	7,278,460.73	2,106,606.76	40° 17' 21.479 N	109° 49' 43.380 W	
9,506.00	1.74	31.59	9,501.67	203.86	138.89	7,278,461.44	2,106,607.20	40° 17' 21.486 N	109° 49' 43.374 W	
9,538.00	2.64	35.17	9,533.65	204.88	139.56	7,278,462.47	2,106,607.86	40° 17' 21.496 N	109° 49' 43.366 W	
9,602.00	2.87	36.62	9,597.57	207.37	141.37	7,278,464.99	2,106,609.62	40° 17' 21.520 N	109° 49' 43.342 W	
9,665.00	2.83	39.72	9,660.50	209.83	143.30	7,278,467.49	2,106,611.51	40° 17' 21.545 N	109° 49' 43.317 W	
9,729.00	2.91	41.51	9,724.41	212.26	145.39	7,278,469.96	2,106,613.55	40° 17' 21.569 N	109° 49' 43.291 W	
9,761.00	2.81	41.38	9,756.38	213.46	146.45	7,278,471.18	2,106,614.58	40° 17' 21.581 N	109° 49' 43.277 W	
9,824.00	2.72	35.00	9,819.30	215.84	148.32	7,278,473.60	2,106,616.41	40° 17' 21.604 N	109° 49' 43.253 W	
9,856.00	2.56	40.53	9,851.27	217.01	149.22	7,278,474.78	2,106,617.29	40° 17' 21.616 N	109° 49' 43.241 W	
9,888.00	2.62	41.62	9,883.24	218.10	150.17	7,278,475.89	2,106,618.22	40° 17' 21.626 N	109° 49' 43.229 W	
9,919.00	2.67	36.97	9,914.20	219.20	151.08	7,278,477.01	2,106,619.11	40° 17' 21.637 N	109° 49' 43.217 W	
9,951.00	2.35	40.95	9,946.17	220.29	151.96	7,278,478.12	2,106,619.96	40° 17' 21.648 N	109° 49' 43.206 W	
9,973.00	2.50	42.15	9,968.15	220.99	152.58	7,278,478.82	2,106,620.57	40° 17' 21.655 N	109° 49' 43.198 W	
<b>Last SDI Production MWD Survey</b>										
10,030.00	2.50	42.15	10,025.10	222.83	154.24	7,278,480.70	2,106,622.20	40° 17' 21.673 N	109° 49' 43.176 W	
<b>Projection to TD</b>										

Survey Report - Geographic



<b>Company:</b>	Gasco Energy	<b>Local Co-ordinate Reference:</b>	Well Pappadakis 15-24-2-1E
<b>Project:</b>	Uintah County, UT NAD83	<b>TVD Reference:</b>	GL 5038' @ 5038.00ft
<b>Site:</b>	Pappadakis Pad	<b>MD Reference:</b>	GL 5038' @ 5038.00ft
<b>Well:</b>	Pappadakis 15-24-2-1E	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Grand Junction District

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
9,973.00	9,968.15	220.99	152.58	Last SDI Production MWD Survey
10,030.00	10,025.10	222.83	154.24	Projection to TD

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_