SR-15

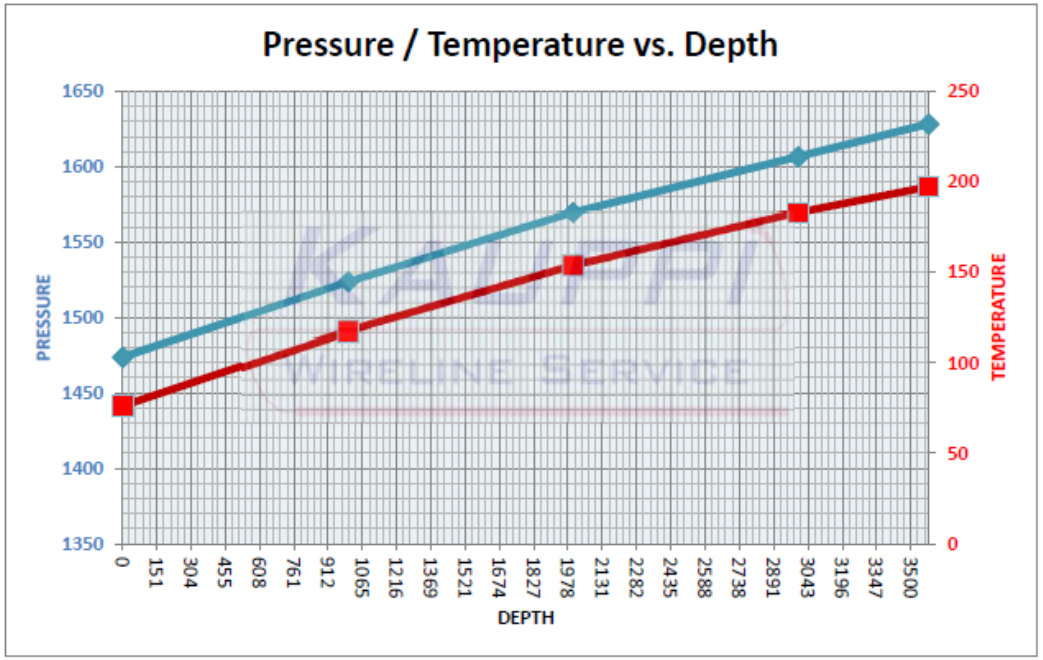
Fallon 1-10
05/13/2022
Perforations 3815’ – 3835’
Top perf 3815’ MD
3497’ TVD and 1330’ ss
BHT 203^{0}F
BHP 1637 psig

The last interval gradients, 0.038 PSI/FT and 0.025^{0}F/FT are used to calculate to the depth of interest.

Static gradient

DEPTH (WL)	PRESSURE	GRADIENT		TEMP	TEMP GRADIENT
0	1473.86	*0 to 1000*	0.050 PSI/FT	76.22	0.042
1000	1523.69	*1000 to 2000*	0.046 PSI/FT	117.83	0.036
2000	1569.84	*2000 to 3000*	0.037 PSI/FT	153.77	0.029
3000	1606.97	*3000 to 3578*	0.038 PSI/FT	183.08	0.025
3578	1628.67	*3578 to 0*	0.043 PSI/FT	197.41	0.034

All pressures shown in PSI and all temperatures are in degrees Farenheight



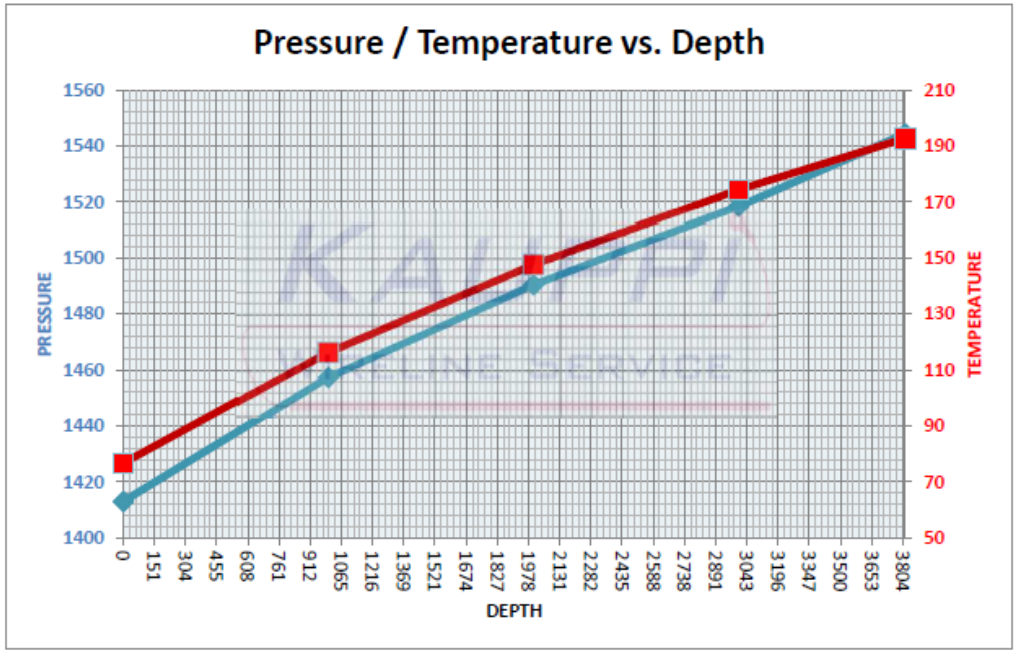
SR-16

Barlow 2-14
06/02/2023
Perforations 3906’ – 3936’
Top perf 3906’ MD
3221’ TVD and 1045’ ss
BHT 195^{0}F
BHP 1547 psig

Static gradient

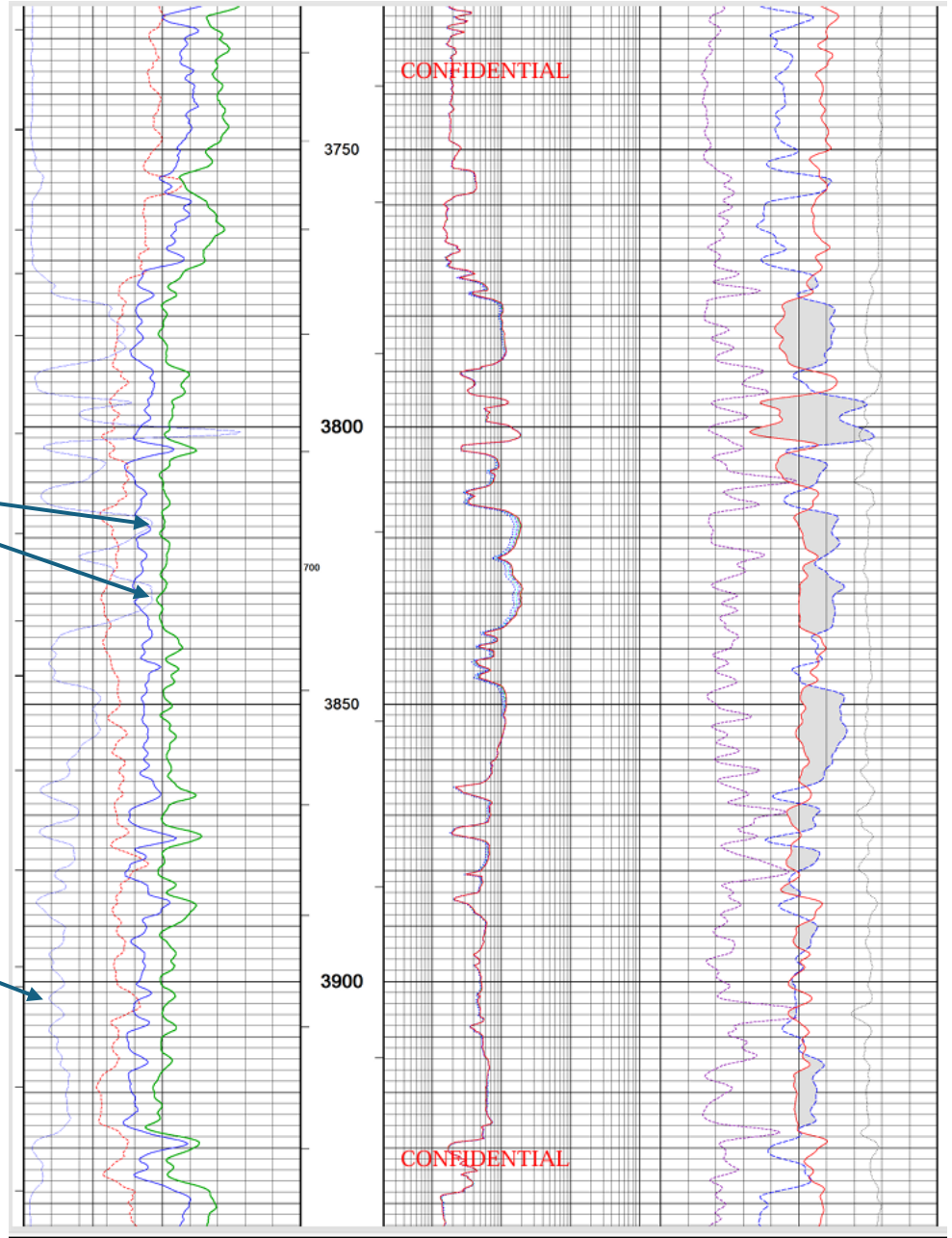
DEPTH (WL)	PRESSURE	GRADIENT		TEMP	TEMP GRADIENT
0	1413.02	*0 to 1000*	0.045 PSI/FT	76.68	0.040
1000	1457.61	*1000 to 2000*	0.033 PSI/FT	116.57	0.031
2000	1490.69	*2000 to 3000*	0.028 PSI/FT	147.89	0.026
3000	1518.34	*3000 to 3814*	0.032 PSI/FT	174.28	0.023
3814	1544.41	*3814 to 0*	0.034 PSI/FT	192.71	0.030

All pressures shown in PSI and all temperatures are in degrees Farenheight



SR-17

Fallon 1-10



Simple method of calculating SW

Rwa=2.3

$Sw=\sqrt{Rw/Rwa}$

$Sw=\sqrt{0.5/2.30}$

$Sw=46.6\%$

Rw=0.5

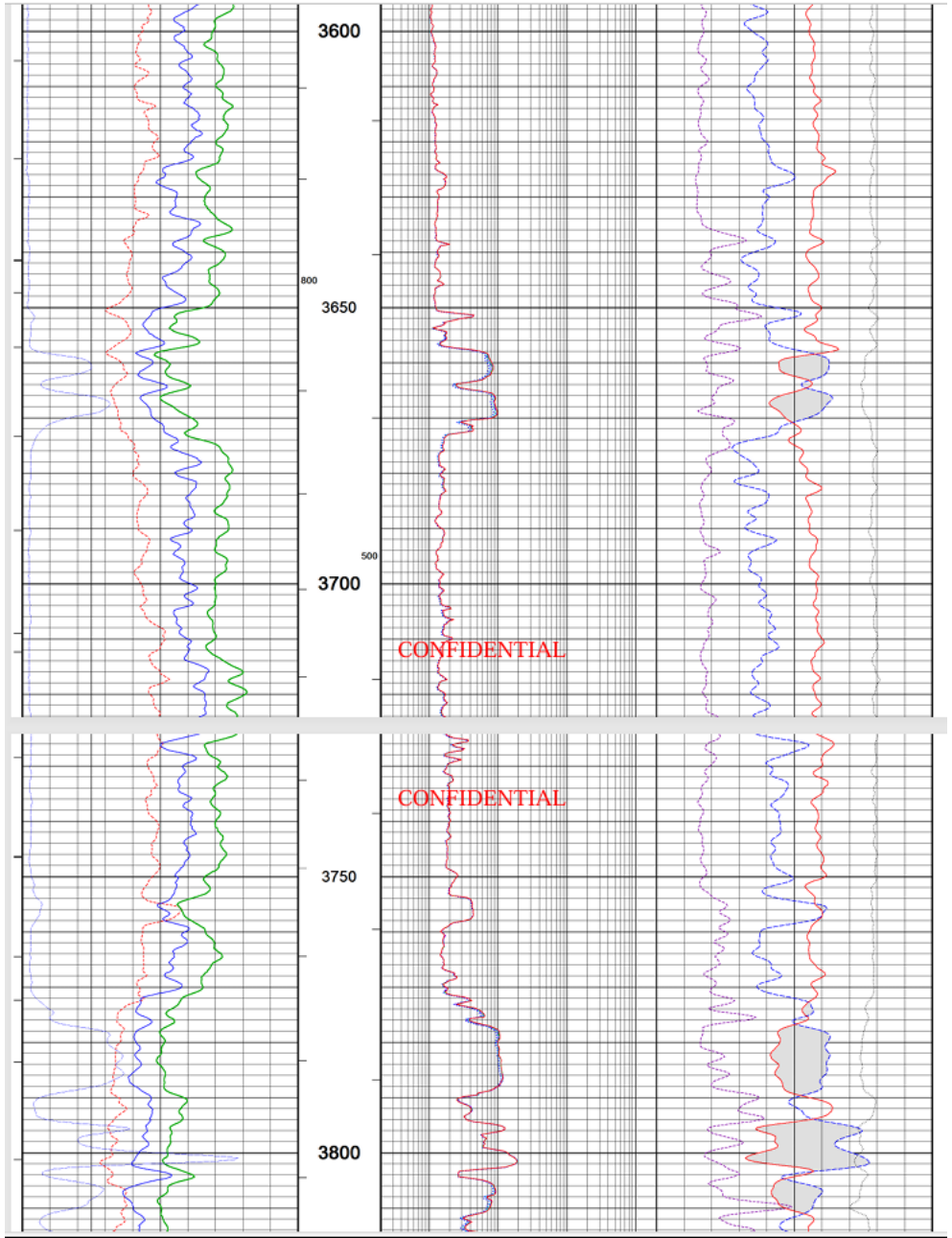
The Quad Combo log data from the Fallon 1-10 was utilized to cross-plot the porosity then couple with log deep Resistivity to calculate saturation of Water, SW, in the pore space.

Depth	Res	D	N	Cross Pl	F	SW
3778	10	33	24	30	8.252414	0.505791
3780	10	33	23	30	8.252414	0.505791
3782	10	35	22	31	7.690668	0.488273
3784	11	33	23	30	8.252414	0.482253
3786	12	33	24	30	8.252414	0.461722
3788	10	32	24	29.5	8.556071	0.515013
3796	11	38	16	30.5	7.964289	0.47376
3800	14	38	18	32	7.183221	0.39882
3802	19	36	14	30.5	7.964289	0.360477
3806	9	35	25	32	7.183221	0.497415
3808	7	34	25	31	7.690668	0.583598
3810	8	32	26	30	8.252414	0.565492
3816	17	31	22	28	9.571983	0.417789
3818	20	30	23	28	9.571983	0.385183
3820	18	29	22	27	10.35046	0.422206
3822	15	28	22	26	11.22533	0.481653
3824	10	27	26	26.5	10.7749	0.577946
3826	15	29	24	27.5	9.950076	0.45347
3828	19	30	22	27.5	9.950076	0.402919
3830	20	30	22	27.5	9.950076	0.392716
3832	20	30	22	27.5	9.950076	0.392716
3834	17	30	22	27.5	9.950076	0.425961
3836	12	30	22	27.5	9.950076	0.506995
3848	12	29.5	21	27	10.35046	0.517095
3850	12	29.5	21	27	10.35046	0.517095
3852	11	29.5	21	27	10.35046	0.540088
3854	12	30	20	27	10.35046	0.517095
3856	10	30	20	27	10.35046	0.566449
3858	9	29	22	27	10.35046	0.597089
3860	8	28	23	26.5	10.7749	0.646163
3862	7	29	24	27.5	9.950076	0.663812
3864	5.8	30	25	28	9.571983	0.715266
			Average =	28.46875		

SR-18

Fallon 1-10
A Sand 3650’ – 3672’
Top 3650’ MD
3353’ TVD and 1186’ ss
BHT 199^{0}F Est.
BHP 1630 psig Est.
It is important to note that both the BHT and BHP are estimated since the A Sand has not been perf-orated to date.

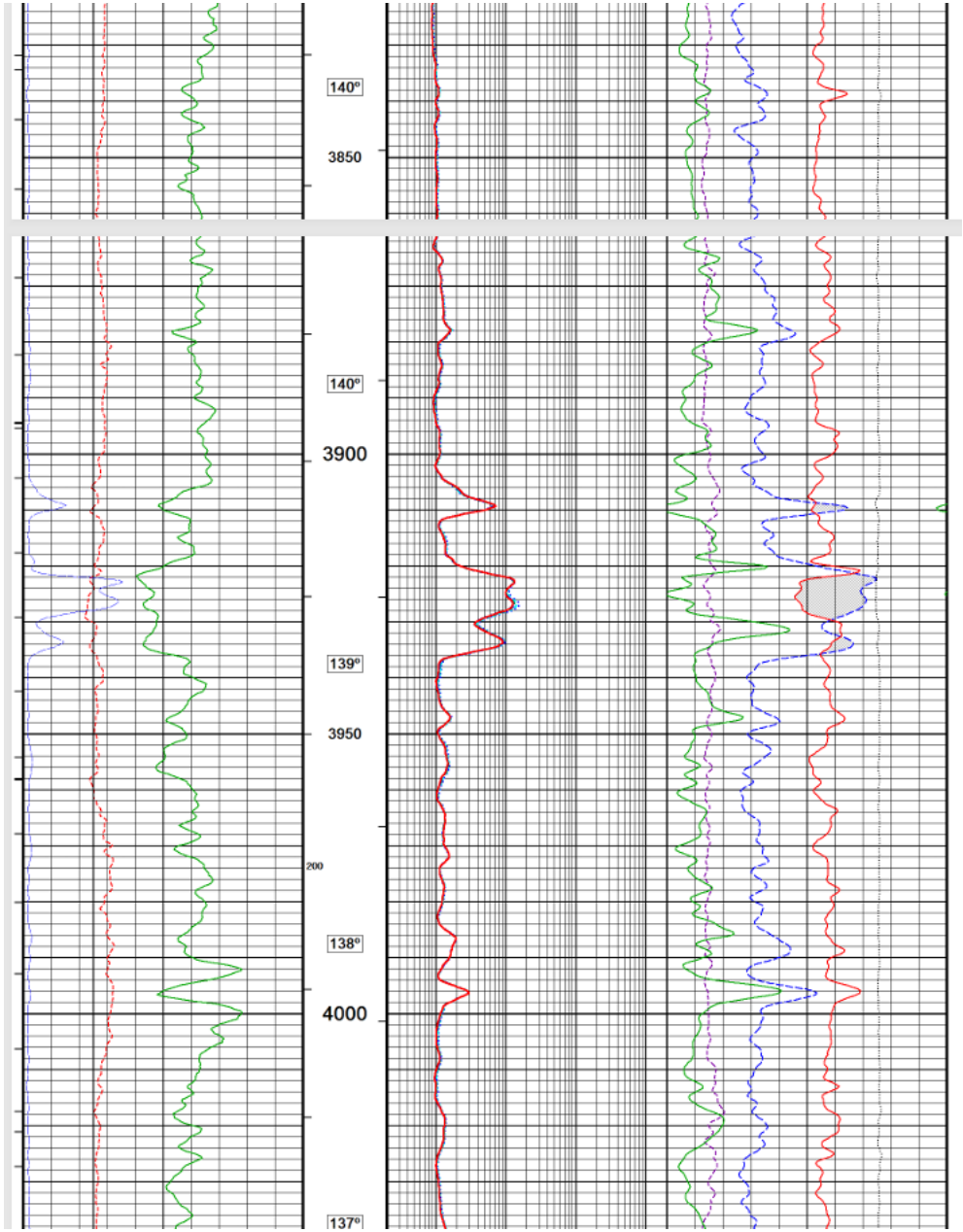
Fallon 1-10



SR-19

Barlow 2-14

The B Sand Quad Combo Log of the 2-14 from 3906’ to 3936’ is not as clean as the B Sand in the Fallon 1-10 well so the SW calculations will lead to a higher value.



SR-20

Certificate of Analysis

Number: 2500-24010258-004A

Greeley Laboratory
2881 S. 31st Ave
Unit 6-8
Greeley, CO 80631

Nathan Caldwell
Snake River Oil and Gas
PO Box 500
Magnolia, AR 71753

Feb. 16, 2024

Station Name: Fallon 1-10
Station Number: ID010031G6
Cylinder No: 1511
Analyzed: 02/05/2024 11:03:49 by VRM

Sampled By: Ken Ballard
Sample Of: Gas Spot
Sample Date: 01/25/2024 12:55
Sample Conditions: 291 psia, @ 109 °F
Method: GPA-2261M

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.73 psia		
Nitrogen	0.351	0.469		GPM TOTAL C2+	4.872
Carbon Dioxide	0.127	0.267		GPM TOTAL C3+	2.701
Methane	83.352	63.831		GPM TOTAL iC5+	1.093
Ethane	8.088	11.609	2.171		
Propane	3.702	7.792	1.023		
Iso-Butane	0.687	1.906	0.226		
n-Butane	1.135	3.149	0.359		
Iso-Pentane	0.381	1.312	0.140		
n-Pentane	0.417	1.436	0.152		
Hexanes	0.775	3.188	0.320		
Heptanes Plus	0.985	5.041	0.481		
	100.000	100.000	4.872		

Calculated Physical Properties	Total	C7+
Relative Density Real Gas	0.7257	3.7019
Calculated Molecular Weight	20.95	107.22
Compressibility Factor	0.9963	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.73 psia & 60°F		
Real Gas Dry BTU	1272	5889
Water Sat. Gas Base BTU	1250	5787

Certificate of Analysis

Number: 2500-24010258-006A

Greeley Laboratory
2881 S. 31st Ave
Unit 6-8
Greeley, CO 80631

Nathan Caldwell
Snake River Oil and Gas
PO Box 500
Magnolia, AR 71753

Feb. 16, 2024

Station Name: Barlow 2-14 Gas
Station Number: ID010029G6
Cylinder No: 1086
Analyzed: 02/05/2024 11:24:59 by VRM

Sampled By: Ken Ballard
Sample Of: Gas Spot
Sample Date: 01/25/2024 14:20
Sample Conditions: 297 psia, @ 101 °F
Method: GPA-2261M

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.73 psia		
Nitrogen	0.357	0.491		GPM TOTAL C2+	4.564
Carbon Dioxide	0.280	0.605		GPM TOTAL C3+	2.459
Methane	83.665	65.903		GPM TOTAL iC5+	0.595
Ethane	7.847	11.585	2.105		
Propane	4.037	8.741	1.116		
Iso-Butane	0.857	2.446	0.281		
n-Butane	1.477	4.215	0.467		
Iso-Pentane	0.442	1.566	0.162		
n-Pentane	0.400	1.417	0.145		
Hexanes	0.317	1.341	0.131		
Heptanes Plus	0.321	1.690	0.157		
	100.000	100.000	4.564		

Calculated Physical Properties	Total	C7+
Relative Density Real Gas	0.7053	3.7019
Calculated Molecular Weight	20.37	107.22
Compressibility Factor	0.9966	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.73 psia & 60°F		
Real Gas Dry BTU	1236	5889
Water Sat. Gas Base BTU	1215	5787

SR-21

Estimated Reservoir Gas Properties

Fallon 1-10

Z - Factor and Effective Gravity Calculation				
Well Name	Fallon 1-10			
Gas Gravity	0.73		(C) Copyright 1990-1997	
% N2	0.35	%	by Douglas M Boone	
% CO2	0.13	%	All Rights Reserved	
% H2S	0.00	%	Version 5.0	
Condensate (1=yes)	1		25-Jun-25	
Reservoir Temp	203	F		
Pressure	1,637	Psia		
Oil Gravity	68	API	- needed for effective gravity	
Yield	16	bbo/MMcf	- needed for effective gravity	
Z - Factor	0.8797			
BHP/Z	1,861			
Effective Gravity	0.760			

Barlow 2-14

Z - Factor and Effective Gravity Calculation				
Well Name	Barlow 2-14			
Gas Gravity	0.71		(C) Copyright 1990-1997	
% N2	0.36	%	by Douglas M Boone	
% CO2	0.28	%	All Rights Reserved	
% H2S	0.00	%	Version 5.0	
Condensate (1=yes)	1		25-Jun-25	
Reservoir Temp	195	F		
Pressure	1,547	Psia		
Oil Gravity	68	API	- needed for effective gravity	
Yield	16	bbo/MMcf	- needed for effective gravity	
Z - Factor	0.8839			
BHP/Z	1,750			
Effective Gravity	0.741			

SR-22

Estimated Formation Volume Factors

Fallon 1-10

$Bg = 35.35\,{}^{p}/_{zT}\,SCF/cuft$

Bg= 100.1 SCF/cu ft

Barlow 2-14

$Bg = 35.35\,{}^{p}/_{zT}\,SCF/cuft$

Bg= 95.37 SCF/cu ft

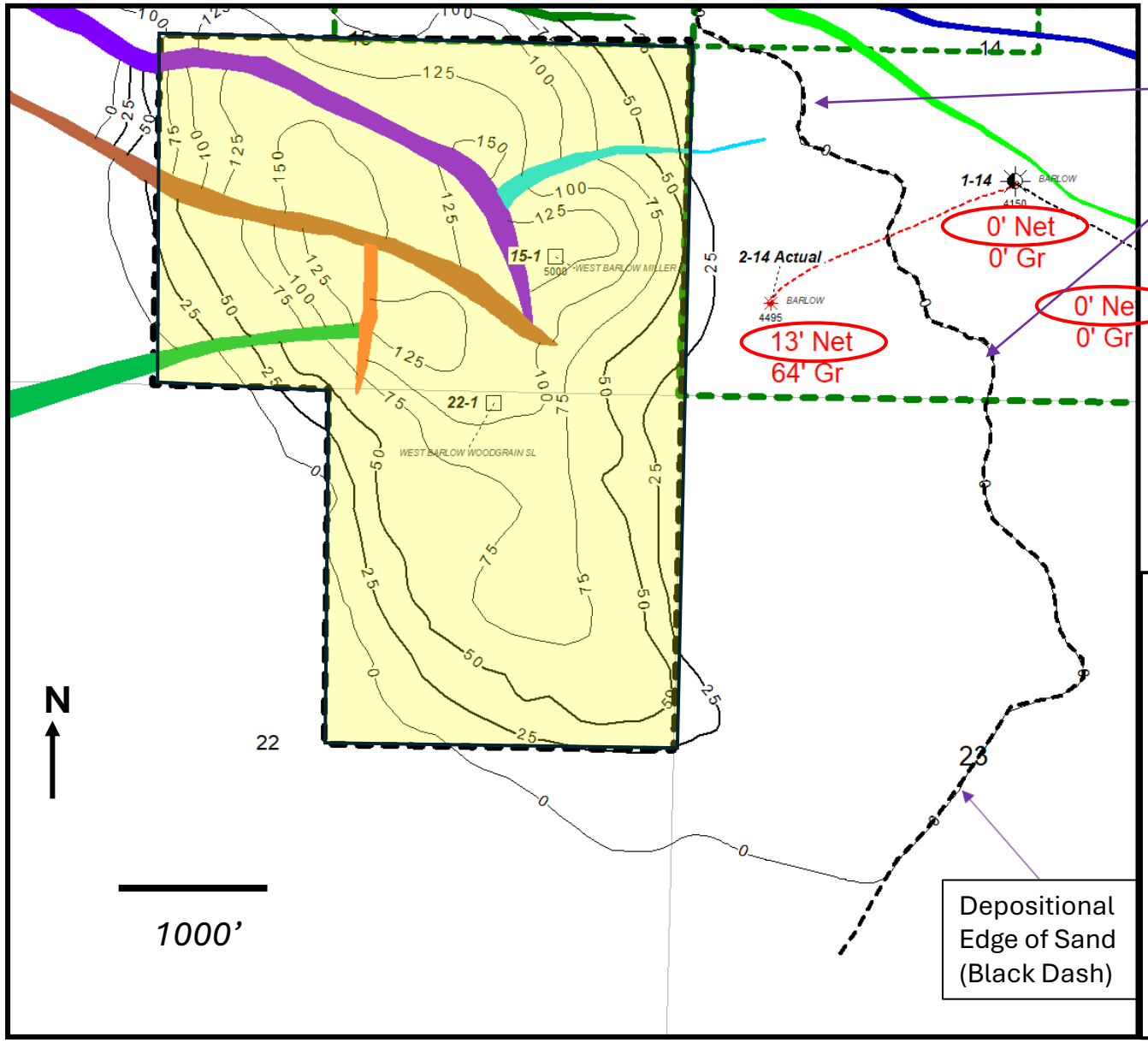
SR-23

Estimated Gas Volume per Acre-Ft

- 1 Acre is 43,560 square feet.
- It follows that an acre of ground that is 1 foot thick has a volume of 43,560 cu ft.
- To convert to gas volume in pore space, V = 43,560XØX(1-Sw)XBg
- The average Bg from the two wells in the B Sand is 97.74 SCF/cu ft.
- Volume per Acre-Ft is 43,560X0.285X(1-.47)X97.74 = 643070 SCF/ Acre-FT or 643 MCF/AF
- Area net recovery suggests approximately 67% recovery so recovery should be 431 MCF/AF

SR-24

Isopach Map: Sand B Net Gas Sand

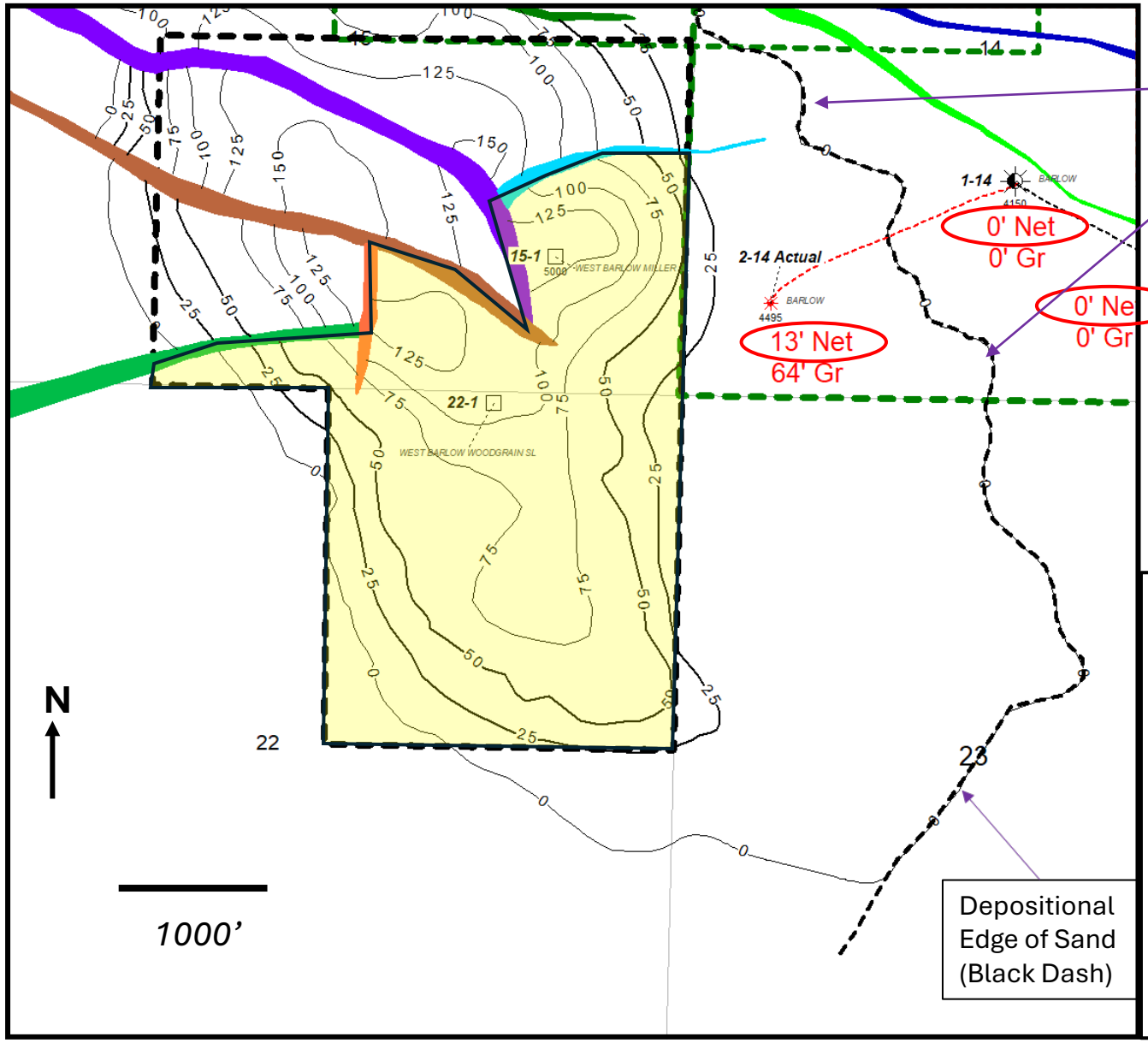


The Net Pay Contours were digitized in Surfer® and calculations resulted in a Volume of 30,150 AF. This value was then multiplied by the Gas Volume per Acre-Ft of 431 MCF/AF and resulted in 12,994,650 MCF or 13 BCF of recoverable Gas

Isopach Map
Sand B: Net Gas Bearing Sand
Harmon Field Area
Payette Co., Idaho
Thickness: feet
Contour Interval: 25'
Scale: Approx. 1":1000'
D. M. Smith June. 2025

SR-25

Isopach Map: Sand B Net Gas Sand



The Net Pay Contours south of the faults were digitized in Surfer® and calculations resulted in a Volume of 15,728 AF. This value was then multiplied by the Gas Volume per Acre-Ft of 431 MCF/AF and resulted in 6,778,768 MCF or 6.8 BCF of recoverable Gas

Isopach Map
Sand B: Net Gas Bearing Sand
Harmon Field Area
Payette Co., Idaho
Thickness: feet
Contour Interval: 25'
Scale: Approx. 1":1000'
D. M. Smith June. 2025

SR-26

The graph plots shut in tubing pressure (SITP) with time after the Barlow 2-14 well has been shut in. The graph plots the SITP reading for each day of shut-in. The day of shut in and its colored plot shows that each subsequent shut-in period results in a lessor maximum pressure. This is indicative of a volumetric gas reservoir without aquifer support.