Company	Prospect Oil & Gas Corp
Well	Popa A-2
Field	Trapp
County	Barton
State	Kansas
Coordinates	Latitude: 38.4333 Longitude: -98.7667
Elevation	GL: 1848 KB: 1853
Date	10-14-2021
Time	08:00 CT
Logging Unit	3
Engineer	Brad Hutchinson
Operator	Steve Schmidt
Bit Size	7.875 in
Mud Type	Fresh Water
Max Temp	103 °F
Max Deviation	0.25°
Max Drill Rate	60 min/ft
Max Gas	2700 units
Max Gas Depth	3400 ft
Max Chlorides	1000 mg/l
Max Flow In	300 gpm
Max Flow Out	300 gpm
Max Pump Pressure	1000 psi
Max Mud Weight	9.2 ppg
Max Viscosity	60 sec
Max Pit Gain	20 bbl
Max Hole Depth	3500 ft
Casing Shoe	225 ft
Casing Size	8.625 in
Casing Weight	23 lb/ft
Hole Condition	Good
Mud Type	Chemical
Water Source	Local
Drilling Time Interval	30 min
Depth Interval	1 ft

MIDWEST WIRELINE LLC

MICROESSENTIALITY LOG

Company: Prospect Oil & Gas Corp
Well: Popa A-2
Trapp
Barton
Kansas

10-14-2021

All interpretations are opinions based on inferences from electrical or other measurements and Midwest Wireline LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Midwest Wireline LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

Comments
NA DENOTES NOT AVAILABLE OR NON-APPLICABLE.
Russell,
South to NW 220 Rd.
1 West, North then East into

Log Measured From: Kelly Bushing 8 Ft. Above Permanent Datum

THANK YOU FOR USING MIDWEST WIRELINE LLC
785-625-3858

Your Midwest Wireline Crew	This Log Record Was Witnessed By
Engineer: D. Schmidt	Primary Engineer: Brad Hutchinson
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Log Variables

Database C:\Program Files\Midwest Data\Datapropect_popa a 2.db
Dataset: field\wellhistory\Scan\Scan\Scan\Scan_popa_a_2_001_

Tool - Bottom

	Tool	Bottom	Length (ft)	O.D. (in)	Weight (lb)
GR	40.33	3.00	3.50	50.00	
CNLSC	37.23	5.00	3.50	100.00	
CNSSC	36.46				
LSD	29.16	8.50	4.05	250.00	
DCAL	26.17				
SSD	27.66				
MCAL	19.58	7.58	4.00	65.00	
MSFL	19.58				
MN	19.58				
RLL3F	13.50	18.25	3.50	220.00	
RLL1	13.50				
CILD	8.33				
CILM	4.50				
SP	0.20				

Dataset: prospect_popa a 2.db: field\wellhistory\Scan 3
Total weight: 42.30 lb
Total length: 955.00 lb
Tool diam: 4.00 in

A	BORHO	BOTTEMP	CASINGD	CASTHICK	FLUIDDEN	M	MATRIXDEN
1	7.875	degF (°F)	5.5	0	1	2	2.71
MPORSEL	PERM S	RMDERN	SPSHIFT	SWTSHIF	SZCOR	TDDTYP	
Limestone	No	medium	psi	degF	%	OF	
		0	0	75	0	3488	

Variable Description

A: Cement Factor (sk)
BORHO: Borehole Fluid
BOTTEMP: Bottom Hole Temperature
CASINGD: Casing Diameter
CASTHICK: Casing Thickness
FLUIDDEN: Fluid Density
M: Cement Exp Exp
MATRIXDEN: Matrix Density
MPORSEL: Neutron Porosity Curve Select
PERM S: Permeability Scale
RMDERN: Deep Density Core Correction
SPSHIFT: Spontaneous Potential Shift Correction
SWTSHIF: S.P. Gasoline Offset
SZCOR: Size Core Barrel Diameter
SZCOR: Clb Size Core
TDDTYP: Tool Depth

DETAIL SECTION

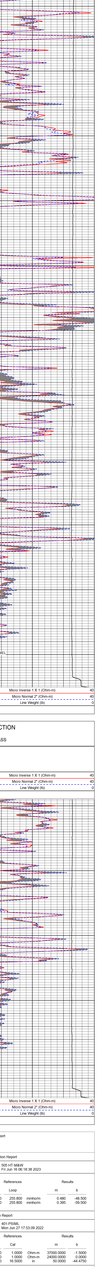
MAIN PASS

Database File: prospect_popa a 2.db
Dataset Pathname: wlnrdrpass3.5
Presentation Format: dual_ind
Dataset Creation: Mon Jul 22 08:18:18 2021
Charted by: Depth in Feet scaled 1:240

Gamma Ray (GAPI) 150 | Micro Inverse 1 ft 1 (Ohm-m) 40 | Micro Normal 2" (Ohm-m) 40 | Low Weight (lb) 100

0.875 Hole Size (in) 7.875 | 0 Micro Caliper (in) 10 | 0 Micro Normal 2" (Ohm-m) 40 | 10000 Low Weight (lb)

200 SP (mv) 100



REPEAT SECTION

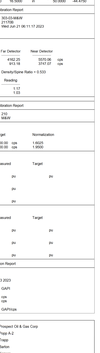
REPEAT PASS

Database File: prospect_popa a 2.db
Dataset Pathname: wlnrdrpass3.5
Presentation Format: dual_ind
Dataset Creation: Mon Jul 22 08:18:17 2021
Charted by: Depth in Feet scaled 1:240

Gamma Ray (GAPI) 150 | Micro Inverse 1 ft 1 (Ohm-m) 40 | Micro Normal 2" (Ohm-m) 40 | Low Weight (lb) 100

0.875 Hole Size (in) 7.875 | 0 Micro Caliper (in) 10 | 0 Micro Normal 2" (Ohm-m) 40 | 10000 Low Weight (lb)

200 SP (mv) 100



Calibration Report

Database File	prospect_popa a 2.db
Dataset Pathname	wlnrdrpass3.5
Dataset Creation	Mon Jul 22 08:18:19 2021

Dual Induction Calibration Report

Serial Model	SFL-DIGITAL
Surface Cal Performed	Mon Jul 19 16:38 2021

	Readings		References		Results	
	Air	Loop	Air	Loop	m	b
Deep	167.000	600.000	0.000	200.000 mmho/m	0.960	-48.500
Medium	167.000	600.000	0.000	200.000 mmho/m	0.000	-48.500

Moving Calibration Report

Serial Model	SFL-DIGITAL
Performed	Mon Jun 27 17:10:59 2022

	Readings		References		Results	
	Zero	Cal	Zero	Cal	m	b
Normal	0.5000	1.5000	0.0000	1.5000 Ohm-m	37000.6000	-0.5000
Inverse	0.5000	1.5000	0.0000	1.5000 Ohm-m	24000.5000	0.5000
Caliper	1.0000	1.0000	1.000	1.000 in	16.0000	-44.4700

Compensated Density Calibration Report

Serial Model	SDLIS-GEMM
Source	2310
Master Calibration Performed	Wed Jun 21 06:11:17 2023

Master Calibration

	Density		Far Detector	New Detector
Magnesium	1.740	g/cc	4452.25	3315.68
Aluminum	2.720	g/cc	8712.00	6137.07
	Spine Angle = 75.35		Density/Spine Ratio = 0.533	

Size	Reading
Small Ring	4.00 in 1.12
Large Ring	14.00 in 1.03

Compensated Neutron Calibration Report

Serial Number	272
Tool Model	NMGR

CALIBRATION

	Detector	Readings	Target	Normalization
	Short Space	1000.00 cps	1000.00 cps	1.0000
	Long Space	800.00 cps	1000.00 cps	1.0000

PRE-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space	n/a		
	Long Space	n/a	pu	pu
2)	Short Space	n/a		
	Long Space	n/a	pu	pu
3)	Short Space	n/a		
	Long Space	n/a	pu	pu

POST-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
	Short Space	n/a		
	Long Space	n/a	pu	pu
1)	Short Space	n/a		
	Long Space	n/a	pu	pu
2)	Short Space	n/a		
	Long Space	n/a	pu	pu
3)	Short Space	n/a		
	Long Space	n/a	pu	pu

Gamma Ray Calibration Report

Serial Number	103
Tool Model	MGRA
Performed	Fri May 28 10:44:43 2021

Calibration Value	1.0	GAPI
Background Reading	0.0	cps
Calibration Reading	1.0	cps
Sensitivity	0.5700	GAPI/cps

MIDWEST WIRELINE

Company	Prospect Oil & Gas Corp
Well	Popa A-2
Field	Trapp
County	Barton
State	Kansas