

Erb West Post Job Report

By Ikram Muslim

Background

Well info and Job Objectives

Well	ERBW-118
Tubing Size	3 1/2" 9.2 ppf L80 2 7/8" 6.5 ppf TAIL
Casing Size	9 5/8" X 7" liner
Min ID	2.205" Landing Nipple @ 10562 ft MDDF
Max angle	90 deg @ 11118 ft

Saturation logging candidates were selected in FB 1-N and FB 1-M reservoirs mainly due to 60% of the gas is estimated to be residing in the FB-1 N sands while 10% is coming from FB-1 M sands.

Job Objectives

- To run Pulse Neutron Logging (PNL) on N-Vision and CO mode from **10,557– 9,965 ft MDDF**.
- To determine the oil saturation across the M and N reservoirs
- To update the current OWC and GOC across M and N reservoirs

WELL NAME: EW-118

COMPLETION SCHEMATIC

WELL	: EW-118	PRODN. CASING	: 9 5/8" x 7" liner
FIELD	: ERB WEST	PRODN. TUBING	: 3 1/2" x 9.2 #/ft AMS28 TBG, L-80
LOCATION	: EWDP-A		: 2. 7/8 x 6.5 lb/ft, TAIL
COMPLETION DATE/RIG	: 18 NOV 1987/ T-6	DEPTH UNIT	: FT.AH.BTHF (44 FT.BDF)
WELL TYPE	: Single Selective Producer	LAST JOB	: FGS - 23/03/15
WELL HEAD	: FMC	REMARKS	:
X-OVER TYPE	: 5-4 ACME EUE	UPDATED BY	: Norsharmilla
MAX DEVIATION	: 90 deg ft at 11118 ft	DATE	: 23-Mar-15

WELL BORE SCHEMATIC	DEPTH FT.AH.BTHF	EQUIPMENT	ID	OD	REMARKS		
	12	432	3. 1/2" FLOW COUPLING 3. 1/2" BP-6 NIPPLE	2.910 2.812	3.875 4.562	B7	
	29	1288	3. 1/2 KBUG SPM	2.875	5.390	DK-1	
	46	2210	3. 1/2 KBUG SPM	2.875		DK-1	
	54	3354	3. 1/2 KBUG SPM	2.875		DK-1	
	52	4470	3. 1/2 KBUG SPM	2.875		DK-1	
	48	5087	3. 1/2 KBUG SPM	2.875		DK-1	
	55	6533	3. 1/2 KBUG SPM	2.875		DK-1	
	55	6571	3. 1/2" X-NIPPLE	2.750	3.905		
		7644	TOP OF TIE-BACK PKR				
		7956	9. 5/8" CASING SHOE				
		8004	3. 1/2 KBUG SPM	2.875		DK-1	
		53	9392	3. 1/2 KBUG SPM	2.875		DK-1
		46	10261	3. 1/2" XO-SSD	2.750	4.200	CLOSED
		45	10300	3. 1/2" BGH 10 SEALS, 80-40			
		10304	BAKER 7" F-1 PKR, 80-40				
		45	10309	3. 1/2" HCS 2. 7/8" HCS X-OVER			
		45	10336	2. 7/8" XO-SSD	2.313	3.840	OPEN (27/2/16)
			2. 7/8" BLAST JOINTS, 10395-10456	2.380			
		45	10435	2. 7/8" EBH 12 SEALS, 80-40	2.375	4.000	
		10439	2. 7/8" BLAST JOINTS, 10445-10456	2.380			
	44	10484	2. 7/8" XO-SSD	2.313	4.000	OPEN (24/2/16)	
	44	10518	2. 7/8" XN LANDING NIPPLE	2.205	4.000		
	10803	LANDING COLLAR					
	10866	7" LINER SHOE					
	10896	TD					

Note: All depths FT.AH.BTHF to top of the equipments.

Prepared by: Norsharmilla
Reviewed by: Norsharmilla M Nordin
DATE UPDATED: 23-Mar-15

Operation Summary

ERBW-118	➤ To perform Dummy RAPTOR BHA
	➤ To run Raptor Contact Logging (PNL) on Sigma and CO mode from 10,562 ft MDDF – 9,965 ft MDDF (10,518 – 9,921 ft-MDTHF).

RUN	INTERVAL (FT-MDDF)	STATUS
1. DUMMY RAPTOR BHA	UNTIL TARGET DEPTH 10,562 FT MDDF	COMPLETED
2. RAPTOR LOGGING	10,100 – 10,557 FT MDDF X 5 PASSES	COMPLETED

Offshore Activity Summary

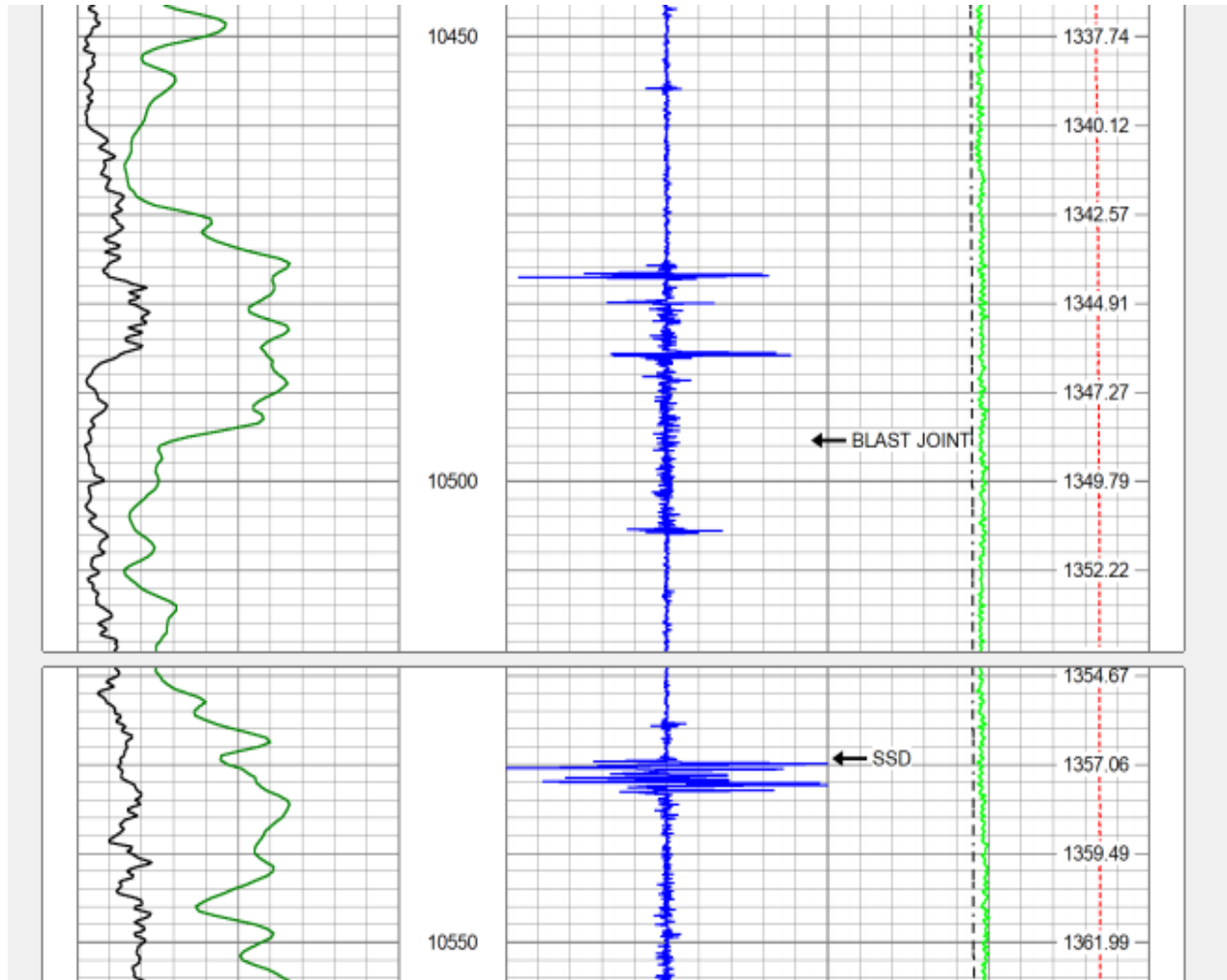
DATE	WELL NO	ACTIVITY	STATUS
5/11/22	EW118	RIG UP HYDRAULIC MAST AND ASSIST DELEUM ON SLICKLINE SURFACE PREPARATION	COMPLETE
6/11/22	EW118	RIH DUMMY RAPTOR TOOL TO TARGET DEPTH PRIOR TO PERFORM GRCCL CORRELATION	COMPLETE
7/11/22	EW118	RIH RAPTOR TOOL TO TARGET DEPTH TO PERFORM N-VISSION (MAIN & REPEAT PASS)	COMPLETE
8/11/22	EW118	RIH RAPTOR TOOL TO TARGET DEPTH TO PERFORM CO MODE (3 PASSES)	COMPLETE
9/11/22	EW118	ASSIST DELEUM TO SET B7 SAFETY VALVE	COMPLETE

Plan and Actual Run Sequences

PLANNED RUN	ACTUAL RUN
Perform Dummy RAPTOR BHA until Target Depth @ 10,587 ft MDDF	Perform Dummy RAPTOR BHA with revised Target Depth @ 10,562 ft MDDF
Perform RAPTOR Logging N-vision Mode	Perform RAPTOR Logging N-vision Mode
Log Up Bottom Interval @ 10,570 – 10,100 ft MDDF X 2 Passes	Log Up Bottom Interval @ 10,560 – 10,100 ft MDDF X 2 Passes
Perform RAPTOR Logging CO Mode	Perform RAPTOR Logging CO Mode
Log Up Bottom Interval @ 10,570 – 10,100 ft MDDF X 3 Passes	Log Up Bottom Interval @ 10,560 – 10,100 ft MDDF X 3 Passes

Data Compilation

Correlation Pass



Toolstring consist of CHD, 4 sinker bar and basic PLT (GR, CCL, PRESSURE & TEMPERATURE) was run and conveyed via 0.281" 1N29-S77 electromechanical cable to reach to the target depth at 10,562 ft-MDDF.

This run was made to correlate depth and to confirm any anomaly throughout the well tubing and casing prior to run raptor tool.

It was observed that all data from the sensors are good. Offset for the Correlation Pass was agreed to be 69.0 ft.

Basic Pulse Neutron Theory

Why do we log Pulse Neutron

Justification

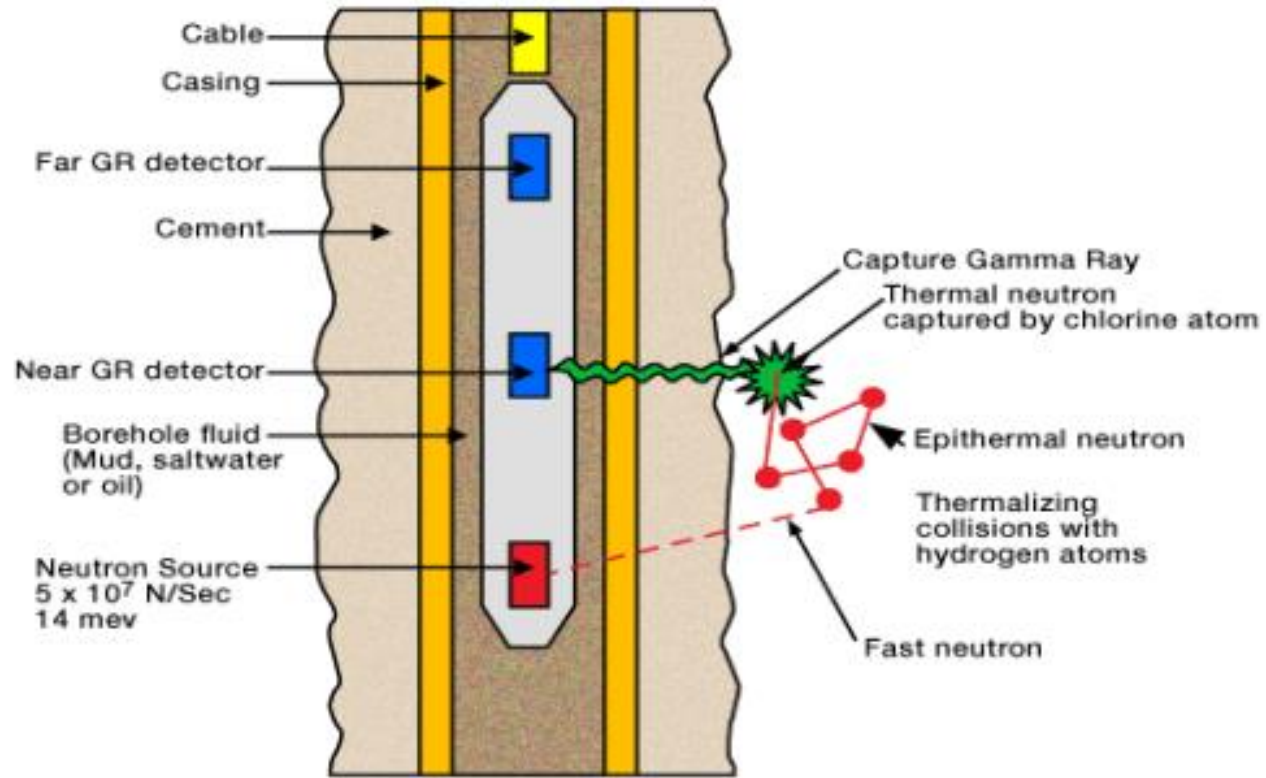
- To deliver potential recoverable which 60% of the gas estimated coming from N sands while 10% M sands
- To validate current gas contact estimates for M and N reservoir

Reservoir Monitoring – fluid properties in formation

- Contact monitoring (sigma mode)
- Saturation logging (C/O mode)

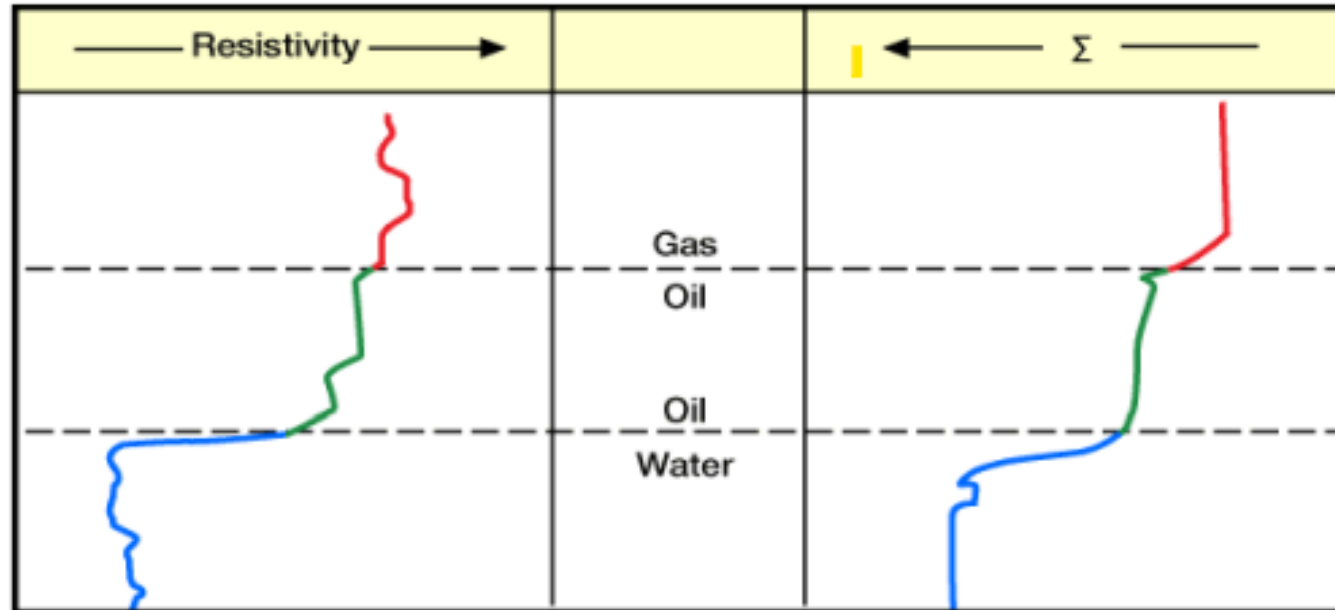
Basic Pulse Neutron Theory

Sigma Logging Physics



Basic Pulse Neutron Theory

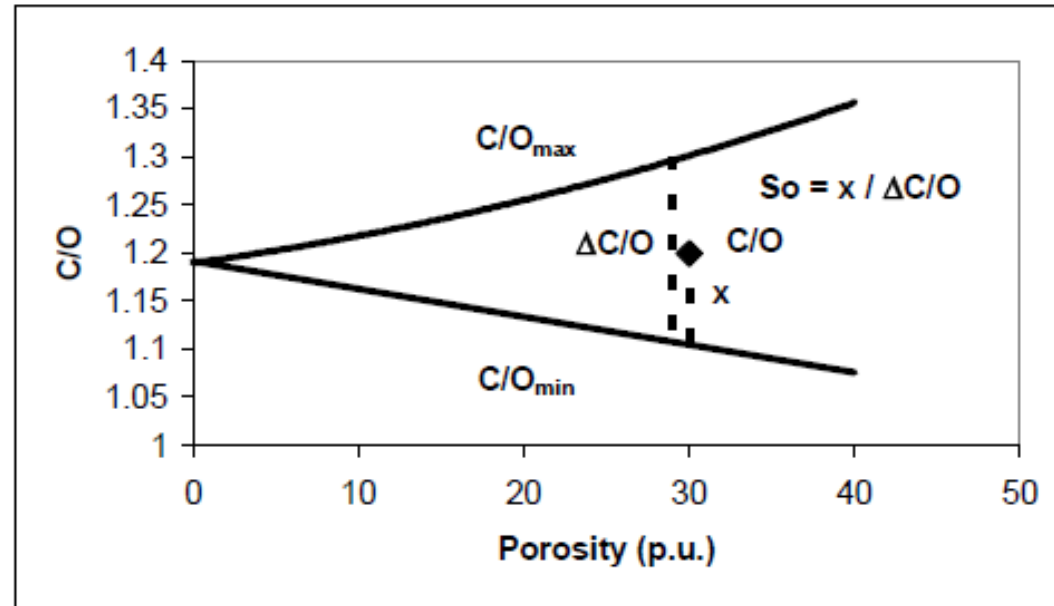
Sigma Response



Sigma response is similar to resistivity except in shales

Basic Pulse Neutron Theory

C/O Logging



- During the neutron pulse, nuclear reactions with carbon and oxygen create gamma rays with characteristic energy distributions
- Hence, the ratio of carbon to oxygen windows is used to determine oil saturation

Customer Satisfaction Survey

DIMENSION BID
WELL INTERVENTION | REMEDIATION SERVICES

CUSTOMER SATISFACTION SURVEY

Client : PCSB Location (Platform) : 4981 WEST (EWOP-A)
 Service(s) : ELINE RAPTOR CONTACT LOGGING Date & Time :
 Well : EW115 Package : 101808

Personnel on Board
 Field Engineers : Mohd Zulfairizim Timbang / Mohd Arif Nurul Muslim
 Crew Chief : Abdul Halim Johansyah / Fakhri Saqib / M Hafiz M Rahim / Jazlin Besar Beking
 Field Operators : M Arwan M Raji / Said Arwan Arud
 Weatherford Field Engineers : Kong Chin Zeng / Jansong Boonrsang

Description	Rating*	Remarks/Comment
Safety		
Personal Protective Equipment (PPE)	<input checked="" type="checkbox"/>	
Safety Awareness	<input checked="" type="checkbox"/>	
Housekeeping	<input checked="" type="checkbox"/>	
Service Quality		
Job Planning & Preparation	<input checked="" type="checkbox"/>	
Operative Efficiency	<input checked="" type="checkbox"/>	
Quality of Job Execution	<input checked="" type="checkbox"/>	
Personnel		
Professionalism of Personnel	<input checked="" type="checkbox"/>	
Performance & Efficiency	<input checked="" type="checkbox"/>	
Communication	<input checked="" type="checkbox"/>	
Technical Knowledge	<input checked="" type="checkbox"/>	
Time Keeping (Punctuality)	<input checked="" type="checkbox"/>	
Equipment		
Equipment & Tool Compatibility	<input checked="" type="checkbox"/>	
Inventory System	<input checked="" type="checkbox"/>	
Technical Support		
Response / Feedback from Town Field	<input checked="" type="checkbox"/>	
Technical Advice	<input checked="" type="checkbox"/>	
Delivery of Spares and Back-ups	<input checked="" type="checkbox"/>	
Reporting		
Daily Report	<input checked="" type="checkbox"/>	
QA/QC Data	<input checked="" type="checkbox"/>	
Overall Service Performance		
Does The Service Objective(s) Met?	<input checked="" type="checkbox"/>	
Area of Improvement (if any)	GOOD JOB IN COMPLETING THE JOB ON WELL EW-115 (E-LINE RAPTOR CONTACT LOGGING) IN A SAFE MANNER. WELL DONE! KEEP IT UP!	

Assessed by
 Client Representative
 Name : Zaid Bin Mokhtar
 Date : Well Services Supervisor: SSS/WIS
 Signature : [Signature]
 E-TRONAS Cengalil S@@@@ (to be filled below to fill up by Management)

Assessed by
 Dimension's Field Engineer/Wireline Operator/Supervisor
 Name :
 Date :
 Signature :
 CS Rating Number : _____

Comment / Action Taken / Follow Up

Action By
 DE Technical Engineer :
 Name :
 Date :
 Signature : _____

Reviewed & Approved by
 DE Field Service Manager :
 Name :
 Date :
 Signature : _____

Rating* 1 - Poor, 2 - Unsatisfactory, 3 - Satisfactory, 4 - Very Satisfactory, 5 - Outstanding
 Note : Please refer to QA-RFP/CS-01 - CS Rating Level & Description for evaluation

Thank you !

Questions and Answering Session

Prepared by,



Name : Muhammad Ikram Muslim

Designation : Junior Field Engineer

Date : 24 November 2022

Verified by,

Name : Faris M. Firdaus

Designation : Field Service Manager

Date :

Verified by,

Name : Azahari Suhari

Designation : Operation Manager

Date :