From:	John Hawkins
To:	Brandon Bradbury
Cc:	DST_JUS_OROGO; Corey Thomson; Casey Stace-Smith; Logan Simmonds
Subject:	Request for Variance From Approved Program 300/F-25-6030-12330/1 (ACW-2022-PARA-F-25A-WID1621(
Date:	July 28, 2023 9:28:46 AM
Attachments:	F-25A BHD w - doc - Feb 2001.pdf
Importance:	High

Hello Brandon,

Paramount Resources is seeking approval to vary from Steps 20-27 of the approved F-25A well abandonment program that provides a safer procedure and achieves isolation.. The approved program planned to come off the on/off connector at 3181.0mKB. Upon a final review with Wellsite Supervisor, Casey Stace-Smith there is a concern of potential trapped gas from the Upper Nahanni perforations 3196.0-3246.0mKB. The wellfile records indicate the Upper Nahanni perforations were squeezed off, however, it is uncertain when this happened in sequence with arriving at the final down hole configuration.

The concern is the potential of trapped gas in the tubing string between the on-off connector and the cemented permanent bridge plug located at 2903mKB. As a result, in order to confirm trapped gas, it would require a hot tap the tubing underneath this section at surface. This is an operation we are not set up to do and the requires services for a hot tap is located in Edmonton.

As part of the coil tubing operation on June 28th, 2023 the plug in the on/off connector and the cement pressure tested after the removal of the shallow-set bridge plug, Paramount is seeking approval to cut free the tubing at 2900mKB and set the permanent plug referenced in step 27 at ~2899mKB to provide for safer operations. At this point the program would continue as per the approved ACW.

Should you require any further information please contact me.

Respectively,

John

WELLBORE

Feb 11, 2001

Purcell Energy Ltd.

Purcell et al Liard
F-25A
Wellbore Diagram

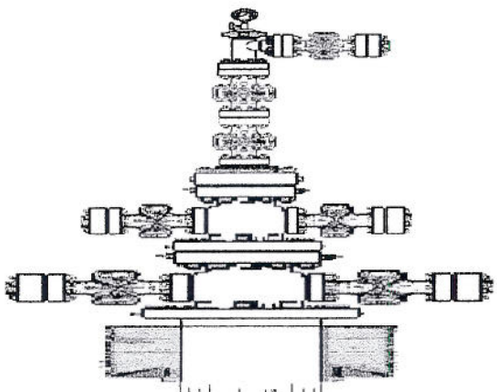


ABB Vetco 7 1/16" 5000# X 11" 5000#

KB elev	**723.0m**
GL	**716.6m**
KB to CF	**6.40m**
KB to TSF	**4.40m**

196.46mKB — **Surface Casing: 508mm 139.9kg/m H-40**
Cemented with 60.0t 0-1-0 Class G

766.40mKB — **1st Intermediate Csg: 340mm 91 kg/m K-55**
Cemented with 60.0t 0-1-0 Class G

Production Tubing (2001-01-00):

1)	88.9mm NUE Incoloy 925 Re-Entry Guide, 121mm OD.	**0.15**
2)	88.9mm Incoloy 925 "XN" nipple, 69.85mm profile & 66mm No-Go.	**0.55**
3)	88.9mm 13.69kg/m Hastelloy G-3 NUE pup joint, perfed.	**3.09**
4)	88.9mm Incoloy "X" nipple c/w 69.85mm profile. (X-over)	**0.45**
5)	88.9mm 13.69kg/m Hastelloy G-3 Nu Vam pup joint.	**2.89**
6)	88.9mm Incoloy "X" nipple c/w 69.85mm profile.	**0.45**
7)	88.9mm 13.69kg/m Hastelloy G-3 Nu Vam pup joint.	**2.89**
8)	Incoloy Cross Over.	**0.34**
9)	177.8mm Magnum GT packer c/w HNBR Elements, Incoloy 925.	**1.07**
10)	Premium Latch/Seal Assembly c/w ATR seal units, Incoloy 925.	**0.33**
11)	Halliburton SD 177.8mm X 88.9mm on-off c/w 69.85mm X profile. Incoloy 925, AFLAS seals Nu Vam connections.	**0.53**
12)	88.9mm 13.69kg/m Hastelloy G-3 Nu Vam pup joint.	**2.89**
13)	88.9mm Incoloy "X" nipple c/w 69.85mm profile.	**0.45**
14)	88.9mm 13.69kg/m Hastelloy G-3 Nu Vam pup joint.	**2.89**
15)	88.9mm Injection Valve c/w 71.45mm profile, Incoloy 925.	**0.78**
16)	88.9mm 13.69kg/m L-80 Nu Vam pup joint.	**1.86**
17)	343 joints 88.9mm 13.69kg/m L-80 Nu Vam tubing.	**3162.00**
18)	3 88.9mm 13.69kg/m L80 pup joints. (2.8, 2.5 & 0.43m)	**5.73**
19)	ABB Vetco tubing hanger c/w 88.9mm Nu Vam X 88.9mm Acme lift threads & 3" BPV threads.	**0.24**

Total Tubing Length:	**3189.57**
KB to THF:	**4.40**
Landed Depth (mkB):	**3193.97**

Halliburton Injection Nipple c/w 3/8" Incoloy Injection Line.
3174.22mKB

3177.89mKB — **Tie Back Liner: 177.8mm 43.16, 38.69 & 34.23kg/m L-80 LT&C**
Tie Back Liner cemented into place.

3165.0mKB

3181.23mKB

3178.0mKB — **2nd Intermediate Csg: 244.5mm 64.74kg/m L-80 LT&C**
2 Stage Cement Job.

3186.39mKB — NOTE: Cannon tbg collar guards installed on all connections and 1 monel band/joint to hold chemical injection line.

3189.73mKB — Annulus filled with Inhibited Trysol Killsol, 1052kg/m3.

3193.27mKB

Upper Nahanni Perfs: (101.6mm EHSC 36 gram DP, 17 spm)
3195.0 to 3246.0mKB

3249.0 to 3260.0mKB

Cement Top@3304.0mKB

ridge Plug
3320.0mKB

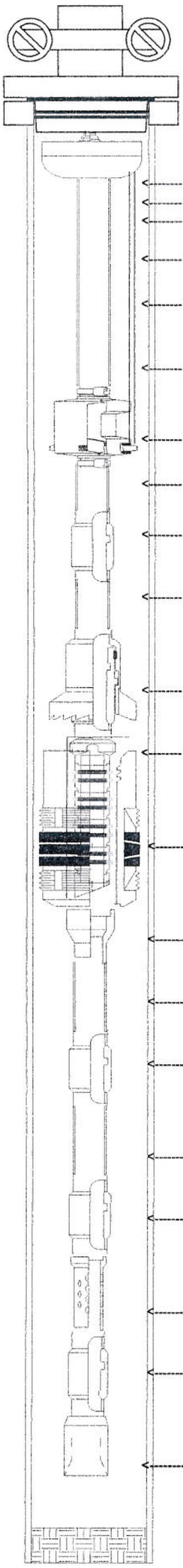
Middle Nahanni Perfs:
3324.6 to 3340.0mKB

3444.0mKB

Lower Nahanni Perfs:
3451.0 to 3466.0mKB

PBTD: 0000.0 mKB
TD: 3478.0 mKB

Liner: 177.8mm 43.16 & 38.69kg/m L-80 Production Casing
Landed @ 3477.0mKB. Top of liner @ 3165.0mKB.



HALLIBURTON **Halliburton Energy Services**
Down Hole Assembly

Guiberson CANADA

1014262	DT #		
Purcell Energy	Mr. Rick Ball	1-403-997-2184	Jan.31/01
Liard	F25-A	N.W.T.	Production

	Tubular	Size mm	Weight & Grade kg/m	Thread	Depth mkB	I.D. mm	Drift I.D. mm
21	Casing	177.8	L-80 43.16			157.1	153.9
20	Liner						
19	Tubing	88.90	L-80 13.69	New Vam		76.00	72.82
18	Tubing						

	Weights	Initial String WT	Transfer Weight	Slackoff WT			
17		36000.00	22000.00	3500.00			

	Fluids	Fluid Type	Fluid WT	Hydrostatic		PRESSURE TESTED	
	Tubing	kilsol	1050.00			21 Mpa	
16	Annulus	kilsol	1050.00			21 Mpa	

	Data	Kickoff Depth	Deviation Angle	H2S	Co2	BHT	BHP
			15@Packer		20%	175.00	

15	Perfs	3195.0-3246.0	3249.0-3260.0				
	Collars	3171	3183				

	Item	Description	I.D. mm	O.D. mm	Length m	Top Depth m
14		Drilling KB to Tubing Hanger Flange	N/A	N/A	4.70	
12	23.	Halliburton Size 3/8" x 0.049 Wall, Injection				4.70
		Control Line c/w Canon Protectors, Monel				4.70
11		Banding & Check Valve, Incoloy line and fittings				4.70
	22.	Less 3500 daN Compression	N/A	N/A	-0.33	4.70
	21.	Tubing Hanger	76.00	178.00	0.23	4.37
10	20.	88.9mm Pup Joint, New Vam L-80	76.00	88.90	0.43	4.60
	19.	88.9mm Pup Joint, New Vam L-80	76.00	88.90	2.50	5.03
10	18.	88.9mm Pup Joint, New Vam L-80	76.00	88.90	2.80	7.53
	17.	343 - 88.9mm Tubing Joints, New Vam L-80	76.00	88.90	3159.35	10.33
	16.	88.9mm Pup Joint, New Vam L-80	76.00	88.90	1.85	3169.68
9	15.	88.9mm Halliburton Injection Valve c/w 69.85mm " X " Profile, New Vam Box X Box	69.85	113.00	0.78	3171.53
	14.	88.9mm Pup Joint, New Vam Pin x Pin Hastelloy Material	76.00	88.90	2.89	3172.31
	13.	88.9mm " X " Landing Nipple c/w 69.85mm Seal Bore, Vam Box x NU Box Incoloy 925	69.85	95.66	0.45	3175.20
8	12.	88.9mm Pup Joint, New Vam Pin x Pin Hastelloy Material	76.00	88.90	2.89	3175.65
	11.	177.8mm x 88.9mm Otis ON/OFF Connector w/ 69.85mm " X " Profile, New Vam Box x Pin	69.85	146.05	0.53	3178.54
7		All Incoloy 925 Metal Goods w/ Double Bonded AFLAS Seals				3179.07
	10.	88.9mm New Vam Box, Guiberson Size 101.6mm Premium Latch Seal Assembly	76.20	119.50	0.33	3179.07
6		c/w 2 ATR Seal Units, Incoloy 925 Flow Wet, Length Overall = 1.18				3179.40
	9.	Halliburton/Guiberson Magnum GT Permanent Packer 177.8mm x 101.6mm Bore	101.60	144.45	1.07	3179.40
		HNBR 0-GAP Sealing Element Incoloy 925 Material, Top - COE=0.60m				3180.47
5	8.	88.9mm Packer to Tubing Crossover, New Vam Box Down Hastelloy Material	76.00	138.00	0.34	3180.47
	7.	88.9mm Pup Joint, New Vam Pin x Pin Hastelloy Material	76.00	88.90	2.89	3180.81
4	6.	88.9mm " X " Landing Nipple c/w 69.85mm Seal Bore, Vam Box x NU Box Incoloy 925	69.85	95.66	0.45	3183.70
	5.	88.9mm Pup Joint, New Vam Pin x Pin Hastelloy Material	76.00	88.90	2.89	3184.15
	4.	88.9mm " X " Landing Nipple c/w 69.85mm Seal Bore, Vam Box x NU Box Incoloy 925	69.85	95.66	0.45	3187.04
3	3.	88.9mm Perforated Pup Joint, NU Pin x Pin Hastelloy Material	76.00	88.90	3.09	3187.49
	2.	88.9mm " XN " Landing Nipple c/w 69.85mm Seal Bore & 66.93mm No-Go	66.93	95.66	0.55	3190.58
2		NU Pin x Pin Incololy 925 Material				3191.13
	1.	88.9mm Wireline Re-Entry Guide, NU Box Up Incoloy 925 Material	76.00	120.70	0.15	3191.13
1	Directions:					

PREPARED BY:
Trevor Olmstead
Red Deer
Alberta
Phone 800-335-6333

Purcell Energy Ltd.

DAILY TOUR REPORT

Well Name: Purcell et al Liard
AFE / PX: 30260-R2
Job Type: Recompletion

LSD: F-25A
Date: 30-Jan-01
Day Number: 31

	CREW	
TOUR 1	Driller	D Austin
	Derrick	A Arnold
	Helper	J Medeiros
	Helper	B Fawcett
	Extra	T Bradley
	Safety	Safety Boss
	BOP	F-Tested
	Accum Press.	20 mpa
	Air Shut Off	F-Tested
	Stab Valve	2-88.9mm
	Fire Ext.	6
	H2S	0.50%
TOUR 2	Driller	T Kathers
	Derrick	C Johannesson
	Helper	D MacKenzie
	Helper	K Kartenstheld
	Extra	C Austin
	Safety	Safety Boss
	BOP	F-Tested
	Accum Press.	20 mpa
	Air Shut Off	F-Tested
	Stab Valve	2-88.9mm
	Fire Ext.	6
	H2S	0.5%

	Today	Cumulative	AFE
Tangible :	$0	$98,250	$0
Intangible :	$34,687	$2,048,395	$0
TOTAL :	$34,697	$2,142,645	$0

Bonus 66	Nab Dupont
RIG OR CONTRACTOR	CONTRACTOR REP.

Perforations, Packer, Plugs, Etc.

Perfs:	
Nahanni : 3249.0 to 3280.0mKB	Bridge Plug: 3444 mKB
Nahanni : 3195.0 to 3246.0mKB	Bridge Plug: 3320 mKB (Capped 16m Cement)
Nahanni : 3324.8 to 3340.0mKB (Suspended)	
Nahanni: 3451.0 to 3456.0mKB (Suspended)	

Weather, Lease & Road Conditions

Clear & -19C
Rod and Lease Good

JOB OBJECTIVE:

Re-Entry / Complete Nahanni

DAILY OBJECTIVE:

Pull Test Packer. RIH with Production Permanent Packer.

ETAILS:

)7:00. Held safety meeting and discussed daily operations and hazards. Performed WARI. Pumped 15m3 fresh water down ie tubing. Released Schlumberger 177.8mm SOT-1 packer. Began feeding annulus fresh water @ 2.5m3/hour.
'OOH with 88.9mm tubing. Tubing string was pulled as follows: 1) 344 joints 88.9mm 13.69kg/m L-80 Nu Vam tubing. 2) .27m 88.9mm 13.69kg/m L80 Nu Vam pup joint. 3) 88.0mm Otis "XN" nipple, 69.85mm profile and 66.93mm No-Go. 4) 1.7m 8.9mm 13.69kg/m L-80 Nu Vam pup joint. 5) 73mm Eue X 88.9mm Nu Vam L80 X-over sub. 6) 177.8mm Schlumberger ;OT-1 dual grip packer c/w high temp elements.
'he packer was missing 2 1/2 elements out of 3. Had problems with well kicking while pulling tubing.
18:00. Rigged in Combined Services wireline truck c/w full lubricator. Casing began to pressure up. Rigged in grease injector.
19:00. Crew change. Held safety meeting and discussed nightly operations and hazards. RIH with 146.05mm gauge ring and ink basket. Worked gauge ring over liner hanger and down to 3280 meters. Had some problems with gauge ring hanging up in ner hanger @ 3168 meters. POOH.
23:00. Assembled Halliburton permanent packer assembly and tail pipe.
)0:30. RIH with packer and tailpipe assembly on Combined Services wireline. Stopped feeding wellbore fresh water. Had roblems getting through liner hanger @ 3168 meters with wireline re-entry guide. Had to work for 60 mins to get through liner anger. Correlated packer assembly on depth to Combined Services GR-CCL log dated Jan 11, 2001.
;et Halliburton Magnum GT packer with center element @ 3180.0mKB. Packer string as follows:

) 177.8mm Halliburton Magnum GT perm packer c/w 925 Incoloy, 0.87m.		3180.0mKB
) 925 Incoloy Cross over sub.	0.34m.	
) 88.9mm 13.69kg/m Hastelloy G-3 Nu Vam pup joint.	2.89m.	
) 88.9mm "X" nipple 69.85mm profile, 925 Incoloy.	0.45m.	3184.10mKB
) 88.9mm 13.69kg/m Hastelloy G-3 Nu Vam pup joint.	2.89m.	
) 88.9mm "X" nipple 69.85mm profile, 925 Incoloy.	0.45m.	3187.44mKB
) 88.9mm 13.69kg/m Hastelloy G-3 Nu Vam perfed pup joint	3.09m.	
) 88.9mm "XN" nipple 69.85mm profile, 66mm No-Go, 925 Incoloy.	0.55m.	3190.98mKB
) 88.9mm NU X 120.65mm OD wireline re-entry, 925 Incoloy.	0.15m.	3191.68mKB

)4:00. POOH and rigged out Combined Services wireline truck. SICP=600 kpa. Bled pressure off through test equipment. 'illed casing with 8.3m3 fresh water and pressure tested packer and casing to 14 mpa. Pressure bled down to 13 mpa after 10 iins. Bled off pressure and let casing gas vent to rig tank.
)7:00. End of report.
)aily Fluid Losses=111.3m3
'otal Fluid to Recover=155m3

Company Representative : R Ball