

## James Thum

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**From:** James Thum  
**Sent:** Wednesday, October 02, 2019 2:29 PM  
**To:** Diane Kassab; Mitch E. Gore  
**Subject:** Re: Idaho - P&A Plan

**Categories:** Operations & Inspections, Application processing

Thank you Diane. The revisions look ok. Please notify us when you know for certain at least 24 hours in advance of commencing operations.

Thank you,

James

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From: Diane Kassab <DKassab@high-mesa.com>  
Sent: Wednesday, October 2, 2019 10:42:45 AM  
To: James Thum <jthum@idl.idaho.gov>  
Subject: RE: Idaho - P&A Plan

Hi James,  
Sorry to bother you, but just wanted to be sure we didn't need to provide anything else before we move on location next Tuesday, October 8. We have plugging approvals for all seven wells, however, Mitch had revised a few procedures. Thanks so much.

Diane  
281-994-5429

From: James Thum <jthum@idl.idaho.gov>  
Sent: Monday, September 30, 2019 11:14 AM  
To: Mitch E. Gore <MGore@high-mesa.com>; Mick Thomas <mthomas@idl.idaho.gov>  
Cc: Diane Kassab <DKassab@high-mesa.com>  
Subject: Re: Idaho - P&A Plan

Hi Mitch,  
Thanks for the revisions, I will review them later tonight. The permits to plug are good for one year. The department will require a sundry notice for plugging activity submitted at least 24 hours in advance of commencement of operations with the estimated start date.

Let me know if you have any questions.

Regards,

James

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From: Mitch E. Gore <MGore@high-mesa.com<mailto:MGore@high-mesa.com>>  
Sent: Monday, September 30, 2019 9:23:55 AM  
To: James Thum <jthum@idl.idaho.gov<mailto:jthum@idl.idaho.gov>>; Mick Thomas <mthomas@idl.idaho.gov<mailto:mthomas@idl.idaho.gov>>  
Cc: Diane Kassab <DKassab@high-mesa.com<mailto:DKassab@high-mesa.com>>

Subject: Idaho - P&A Plan

James – Attached are the P&A procedures for the 7 wells we plan to begin plugging next week 10/8/19. A few of them we've discussed already (Island Cap and Tracy Trust), the others should be similar if not the same as previously approved plans.

Do we need to revise the Sundry notifications or can you send us a note back stating that our previous sundries are acceptable with the attached procedures?

I know that James said he'd be out this week, so I've copied Mick Thomas as well.

Thanks

Mitch

# P&A Procedure

- Well Name: Espino 1-2
- AFE# AMU0012PA1
- API# 11-075-20004
- Field: Hamilton
- County: Payette CO, ID

## Well Info:

- TD: 4500'
- PBDT 1686' (CIBP with 14' cmt)
- Current Perfs: 1608' – 14'
- Wellhead: Top connection 2 9/16" 5K with 2 7/8" EUE 8rd threads
- Prod Csg – 5 1/2" 17# J-55 LTC set at 3,030' Hole size – 8.75"
  - FC at 2953'
  - FS at 3030'
- Surface Csg – 9 5/8" 36# J-55 STC set at 793' Hole size – 12.25"
- Tubing – 2 7/8" 6.5# J-55 EU 8rd
- Packer at 1571'
- CIBP at 1700' with 14' cmt (TOC 1686')
- Well status: Shut in
- BHP: 698 psi (estimate based on normal pressure gradient of 0.433)
- BHT: 130 Deg F +/-
- Status:
  - SITP 680 psig
  - SICP 120 psig

**Objective:** Plug and abandoned well.

- Operation will be rigless utilizing wireline unit, cmt truck, vac truck and lease crew.
- Squeeze perfs, set CIBP inside tbg near pkr, perf circ holes and spot cmt plug from pkr to surface (cmt plug will be inside tbg and csg 0-1550').

**Procedure:**

1. Have operators work all valves and ensure normal operations and proper wheel revolutions. Confirm that the top most valve is holding.
2. Bleed down tbg and csg to cellar if possible before MIRU P&A spread arrives.
3. MIRU ELU, 5K pressure control Cmt pump truck and 3 vac trucks (260 bbls FW plus one empty vac truck for returns).
4. JSA
5. Hook up pump lines to wing valve. (bring all connections – 1", 2", 3" 1502 and LP type thread).
6. Test lines 500 / 2500 psi (against wing).
7. Test backside 300 psi for 5 mins.
8. Open well and displace and gas/fluids back into perfs - establish injection rate / pressure into formation (perfs: 1608' – 14').
  - a. Max injection pressure, once 8.3 ppg water has reached perfs – 400 psi
  - b. Leave backside open and confirm there is no communication. If there is communication between tbg and csg, call Houston office to discuss next steps. If no communication – proceed to next step.
9. Mix 25 sks cmt (5.2 bbls) **Plug #1**
  - a. Cement Recipe TBD – Recipe will be in accordance with API Bulletin E3 per IDL Rules and Regs.
  - b. Anticipate a slurry of Class H Cmt at 1.06 yield 15.6 ppg w/ retarders/LWL additives.
10. Pump cmt slurry and displace cmt to perfs (Disp volume = 9.0 bbls) This leaves cmt from bottom perf at 1614' to pkr depth at 1571' (43' cmt) – see proposed WBS. 4.2 bbls out in perfs and 1.0 bbls left in csg.
11. RIH w/ GR to 1560'. POOH. NOTE: Have lub stabbed on crown w/ GR while performing injection and sqz job.
12. MU 2 7/8" CIBP. **Plug #2**
13. RIH and set CIBP at 1560'. POOH w/ setting tool. Note: Do not set CIBP in collar.
14. Confirm tbg and csg are full. Top off tbg/csg with 8.3 ppg water as necessary.
15. MU 1 9/16" or 2 1/8" RTG and RIH to 1550'.
16. RIH to 1550' and pressure up tbg to 100 psi.
17. Perforate 1550' – 1552' using short penetration circ charges (BH).
  - a. Monitor tbg/csg during perforating and report changes.
18. POOH and confirm shots fired.

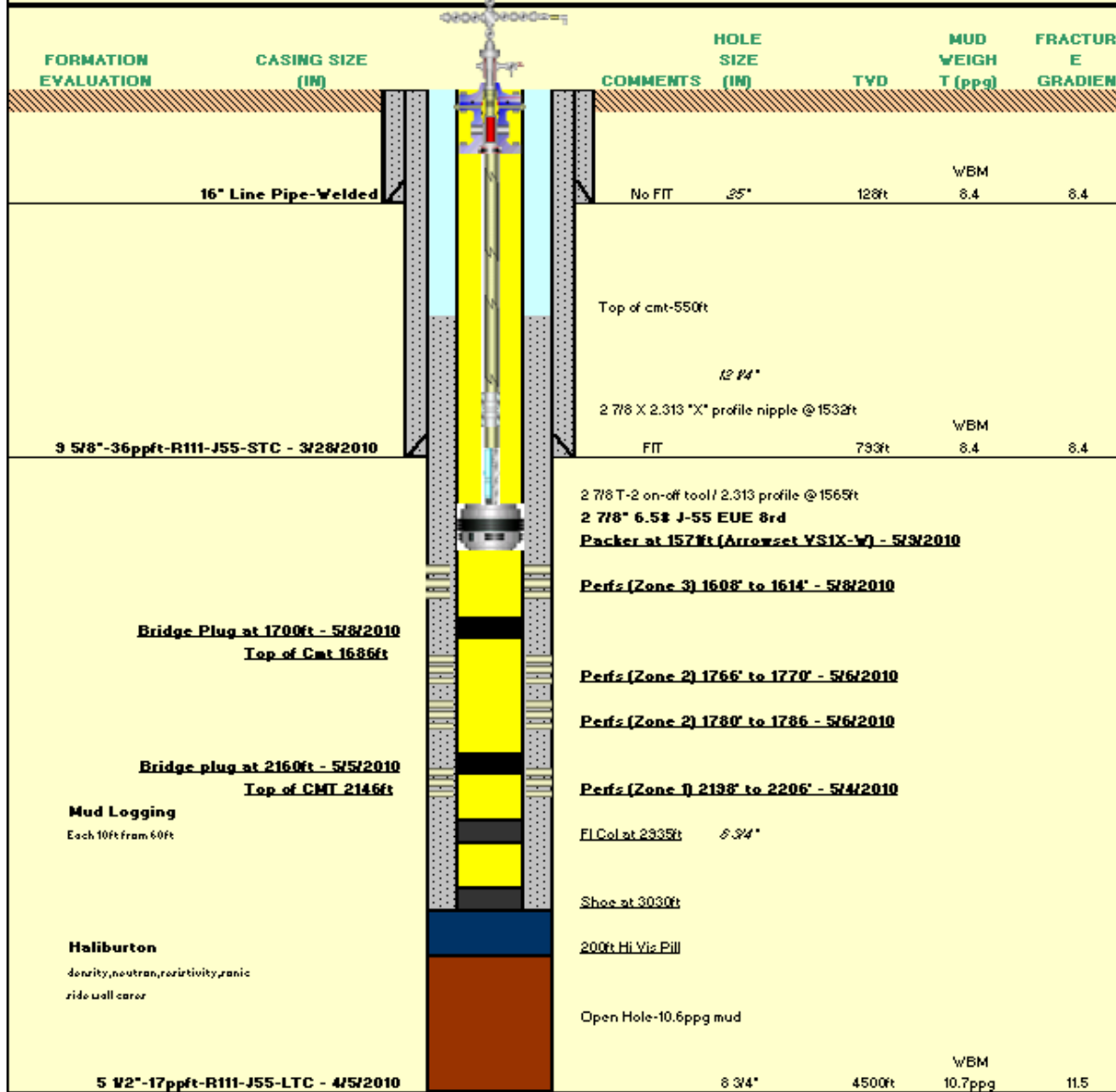
19. Break circulation long way and take returns to empty vac truck (2-3 wellbore volumes at 2-3 BPM).
20. Mix Cmt slurry – 33 bbls (actual volume and yield TBD)
  - a. Cement Recipe TBD – Will be in accordance with API Bulletin E3 per IDL Rules and Regs
  - b. Anticipate a slurry of Class H Cmt at 1.06 yield 15.6 ppg w/ retarders/LWL additives.
21. Pump slurry down tbg and take full returns up annulus, spotting entire slurry inside tbg and annulus from 0' – 1550' (Full balanced plug inside wellbore). **Plug #3**
22. CWI and SD pumps. Monitor SICP and SITP. Leave well SI overnight (12 hrs)
  - a. NOTE: Will consider plugging all wells (down hole ops only), then return with lease crew to dig bell hole, cut csg/tbg, set surface plug, cap and back fill same after all pumping work is completed.
23. RD cementing unit and WLU. MOL.
24. Dig bell hole around well head and cellar.
25. Remove cellar.
26. Check SITP/SICP and blow down same to 0 psig – Monitor tbg and csg and confirm no flow.
27. ND Tree to 4 bolts and secure entire well head/tree with straps/chains with backhoe.
28. Cut windows in 9 5/8" csg at 6' below ground level (Note: will consider making window cuts shallower initially and sever all strings. Then make final cuts and dress off same.
29. Cut and sever 5 1/2" csg and 2 7/8" tbg from windows and let relax.
30. ND tree completely.
31. Secure B section with straps/chains with back hoe.
32. Make full cut on 9 5/8" (Z pattern) and remove A and B section of well head (make cut flush with 16" conductor 6' below surface.
33. Suck out 40 gallons of water (16" x 9 5/8" and 5 1/2" x 9 5/8" annuli).
  - a. Use 0.5' or 1" PVC pipe or hose to suck out or blow out water from these annuli.
34. Mix 5 sks cmt (class TBD) and pour into annuli leaving 5' plugs from 11' – 6'. **Plug #4**
35. Weld 16" plate on conductor (if accessible – if not accessible, plan to weld on 9 5/8" plate to stub).
36. Weld on 10' x 4" (min OD) pipe to conductor leaving 4' of pipe sticking up from ground level.
37. Back fill bell hole per IDL and land owner requirement (make sure 4' section of pipe is visible and above ground. (NOTE: If land owner disapproves the 4' pipe above ground, will need documentation of land owner provision and forward to IDL for notification.

## Alta Mesa Services, LP

### ESPINO 1-2 WELLBORE DATA SHEET

**LEASE:** Bridge Energy  
**WELL:** Espino 1-2  
**LOCATION:** State Hi Way 52  
 Payette County  
**SPUD DATE:** March 2010  
**OBJECTIVE:** Chalk Creek/Poison Creek  
 Columbia River Basalt

**TOTAL DEPTH:** 4450ft  
**SURFACE LOCATION:** N43-58-17.86  
 W116-46-37.19  
**BOTTOM HOLE LOCATION:** N43-58-17.86  
 W116-46-37.19  
**ELEVATION:** 2223ft  
**ELEVATION(KB):** 2235KB



# Proposed P&A WBS

## Alta Mesa Services, LP

### ESPINO 1-2 Proposed P&A WBS

<b>LEASE:</b>	Bridge Energy	<b>TOTAL DEPTH:</b>	4450ft
<b>WELL:</b>	Espino 1-2	<b>SURFACE LOCATION:</b>	N43-58-17.86
<b>LOCATION:</b>	State Hi Way 52		W116-46-37.19
	Payette County	<b>BOTTOM HOLE LOCATION:</b>	N43-58-17.86
<b>SPUD DATE:</b>	March 2010		W116-46-37.19
<b>OBJECTIVE:</b>	Chalk Creek/Poison Creek	<b>ELEVATION:</b>	2223ft
	Columbia River Basalt	<b>ELEVATION(KB):</b>	2235KB

Sqz perfs, set CIBP at 1560', perf tbg at 1550-52 and circulate in 155 sk plug from 1552 to surface.

FORMATION EVALUATION	CASING SIZE (IN)	COMMENTS	HOLE SIZE (IN)	TVD	MUD WEIGHT (ppg)	FRACTURE GRADIENT (ppg)
		Cut 2 7/8" tbg, 5 1/2" Prod csg, 9 5/8" SC 6' below surface 5 sk plug from 6' to 11' (5' plug) 5 1/2" x 9 5/8" annulus and 16" x 9 5/8" annulus Install 16" plate and weld same			WBM	
	16" Line Pipe-Welded	No FIT	25"	128ft	8.4	8.4
Spot cmt plug inside tbg and annulus. 155 sks cmt (Class TBD) 1552 to surface Tbg volume 43 sks 9 bbls and 114 sks 24 bbls						
Plug #1 20 sks sqz'd into perfs, leaving 5 sks inside csg from 1614' to 1571'. Plug #2 CIBP at 1560' (insdie tbg) Plug #3 155 sks 1552' to surface (Tbg/Csg) Plug #4 Surface plug 5 sks 6' to 11'		TOC on 5 1/2" 550' CBL 5/4/10				
	9 5/8"-36ppft-R111-J55-STC - 3/28/2010		12 1/4"			
	Perf tbg: 1550-52' CIBP at 1560'	2 7/8 X 2.313 "X" profile nipple @1532ft		793ft	WBM 8.4	8.4
		2 7/8 T-2 on-off tool / 2.313 profile @1565ft 2 7/8" 6.5# J-55 EUE 8rd Packer at 1571ft (Arrowset VS1X-W) - 5/9/2010				
		Perfs (Zone 3) 1608' to 1614' - 5/8/2010 Sqz Perfs with 20 sks cmt 4.2 bbls sqz'd out with 1 bbl left inside csg (5 sks) from 1571-1614'.				
	Bridge Plug at 1700ft - 5/8/2010 Top of Cmt 1686ft	Perfs (Zone 2) 1766' to 1770' - 5/6/2010				
		Perfs (Zone 2) 1780' to 1786 - 5/6/2010				
	Bridge plug at 2160ft - 5/5/2010 Top of CMT 2146ft	Perfs (Zone 1) 2198' to 2206' - 5/4/2010				
Mud Logging Each 10ft from 60ft		FI Col at 2935ft	8 3/4"			
		Shoe at 3030ft				
Haliburton density,neutron,resistivity,sonic side wall cores		200ft Hi Vis Pill				
		Open Hole-10.6ppg mud				
	5 1/2"-17ppft-R111-J55-LTC - 4/5/2010		8 3/4"	4500ft	WBM 10.7ppg	11.5