

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS
DO NOT MAIL - ACH-43241
TULSA, Oklahoma

RWF 32-4

NABORS/574

Post Job Summary

Cement Surface Casing

Date Prepared: 1/23/2014
Version: 1

Service Supervisor: ARNOLD, EDWARD

Submitted by: Grand Junction Cement Engineers

HALLIBURTON

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3123638	Quote #:	Sales Order #: 900842094
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: Vallad, Gary	
Well Name: RWF		Well #: 32-4	API/UWI #:
Field: Rulison	City (SAP): RIFLE	County/Parish: Garfield	State: Colorado
Contractor: NABORS 574		Rig/Platform Name/Num: NABORS 574	
Job Purpose: Cement Surface Casing			
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: MAYO, MARK		Srvc Supervisor: ARNOLD, EDWARD	MBU ID Emp #: 439784

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ARNOLD, EDWARD John	17.5	439784	LAULAINEN, ROGER Edward	17.5	524413	ROMKEE, DALE Alan	10.5	488215
SALAZAR, PAUL Omar	17.5	445614	YENTER, TRAVIS Drake	17.5	556030			

Equipment

HES Unit #	Distance-1 way						
10248057	60 mile	10616651C	60 mile	10867531	60 mile	10951246	60 mile
10989685	60 mile	11808827	60 mile				

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
2013-10-24	2	0	2013-10-25	15.5	3			
TOTAL			<i>Total is the sum of each column separately</i>					

Job

Job Times

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	24 - Oct - 2013	19:00	MST
Form Type		BHST	Job Started	24 - Oct - 2013	22:00	MST
Job depth MD	1181. ft	Job Depth TVD	1181. ft	Job Completed	25 - Oct - 2013	21:30
Water Depth		Wk Ht Above Floor	4. ft	Job Completed	25 - Oct - 2013	22:38
Perforation Depth (MD)	<i>From</i>	<i>To</i>	Departed Loc	25 - Oct - 2013	23:30	MST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	9 5/8"	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	9 5/8"	1	HES
Stage Tool										Centralizers			

Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc %
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density uom	Yield uom	Mix Fluid uom	Rate uom	Total Mix Fluid uom

Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk	
1	Fresh Water Spacer		20.00	bbl	.	.0	.0	4		
2	VariCemGJ1 Lead Cement	VARICEM (TM) CEMENT (452009)	190.0	sacks	12.3	2.38	13.75	7	13.75	
13.75 Gal		FRESH WATER								
3	VersaCem GJ1 Tail Cement	VARICEM (TM) CEMENT (452009)	160.0	sacks	12.8	2.11	11.75	7	11.75	
11.75 Gal		FRESH WATER								
4	Fresh Water Displacement		86.00	bbl	.	.0	.0	10		
Calculated Values			Pressures			Volumes				
Displacement	88.6	Shut In: Instant		Lost Returns		Cement Slurry	140.6	Pad		
Top Of Cement	SURFACE	5 Min		Cement Returns	30	Actual Displacement	88.6	Treatment		
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	249.2	
Rates										
Circulating	RIG	Mixing	7	Displacement	10	Avg. Job	8			
Cement Left In Pipe	Amount	47 FT	Reason	Shoe Joint						
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID			
The Information Stated Herein Is Correct				Customer Representative Signature						

The Road to Excellence Starts with Safety

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Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: Vallad, Gary	
Well Name: RWF		Well #: 32-4	API/UWI #:
Field: Rulison	City (SAP): RIFLE	County/Parish: Garfield	State: Colorado
Legal Description:			
Lat:		Long:	
Contractor: NABORS 574		Rig/Platform Name/Num: NABORS 574	
Job Purpose: Cement Surface Casing			Ticket Amount:
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: MAYO, MARK		Srv Supervisor: ARNOLD, EDWARD	MBU ID Emp #: 439784

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	10/24/2013 18:30							
Pre-Convoy Safety Meeting	10/24/2013 19:45							Including entire cement crew.
Crew Leave Yard	10/24/2013 20:00							
Arrive At Loc	10/24/2013 22:00							Rig still Running casing. Hole bridged off. Rig started pulling casing at 0830 on 10-25 to go back in with drill pipe. Crew released from location. Requested on location at 0000 on 10-25 crew on location for 8.5 hours.
Crew Leave Location	10/25/2013 09:00							Crew left location. Bulk trucks; head and plug on location.
Call Out	10/25/2013 13:30							Crew called back out. Meet at yard at 1500 requested on location at 1930.
Pre-Convoy Safety Meeting	10/25/2013 15:45							Discussed route and safety while driving.
Crew Leave Yard	10/25/2013 16:00							
Arrive At Loc	10/25/2013 17:00							Rig preparing to run casing.
Assessment Of Location Safety Meeting	10/25/2013 20:00							Water; PH 7; KCL 200; So4 <200; Fe 3; Calcium 120; Chlorides 0; Temp 53.
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

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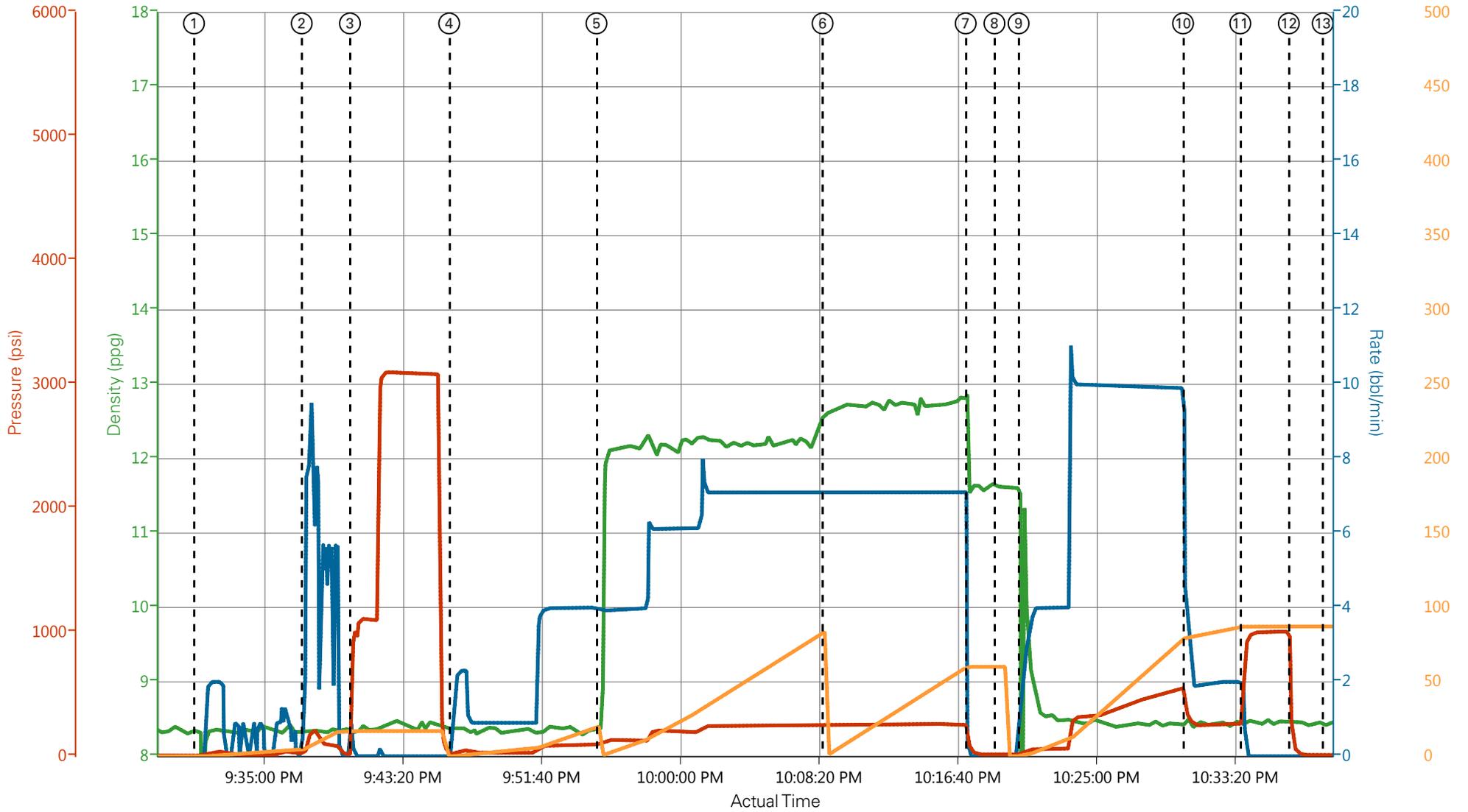
Quote # :

Sales Order # : 900842094

Rig-Up Equipment	10/25/2013 20:15							1 Elite # ; 1 660 bulk truck; 1400 bulk truck; 1 hard line to floor; 1 line to upright; 1 line to rig tank. 9.625" compact head.
Rig-Up Completed	10/25/2013 21:00							
Pre-Rig Up Safety Meeting	10/25/2013 21:05							Including entire cement crew.
Pre-Job Safety Meeting	10/25/2013 21:10							Including everyone on location.
Start Job	10/25/2013 21:30							TD 1181; TP 1171; SJ 47; OH 13 1/2"; Casing 9.625" 32.3# H-40; Mud 10 ppg.
Pump Water	10/25/2013 21:31		2	2			38.0	Fill lines with fresh water. Had to reprime pumps to get pressure test
Test Lines	10/25/2013 21:40						3096.0	Good pressure test, no leaks.
Pump Spacer 1	10/25/2013 21:46		4	20			96.0	20 BBL fresh water spacer.
Pump Lead Cement	10/25/2013 21:55		7	80.5			242.0	190 sks Lead Cement, 12.3 ppg, 2.38 cf3, 13.75 gal/sk.
Pump Tail Cement	10/25/2013 22:08		7	60.1			240.0	160 sks Tail Cement, 12.8 ppg, 2.11 cf3, 11.75 gal/sk.
Shutdown	10/25/2013 22:17							
Drop Plug	10/25/2013 22:19							Plug left container.
Pump Displacement	10/25/2013 22:20		10	78.5			547.0	Fresh water displacement.
Slow Rate	10/25/2013 22:30		2	10			270.0	Slow rate 10 BBL's prior to bumping the plug.
Bump Plug	10/25/2013 22:33					88.5	960.0	Bumped plug, took 500 PSI over.
Check Floats	10/25/2013 22:36							Floats held, 1/2 BBL back. 30 BBL.'s good cement to surface.
End Job	10/25/2013 22:38							
Pre-Rig Down Safety Meeting	10/25/2013 22:40							Including entire cement crew.
Rig-Down Equipment	10/25/2013 22:45							
Rig-Down Completed	10/25/2013 23:15							

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pre-Convoy Safety Meeting	10/25/2013 23:20							Including entire cement crew.
Crew Leave Location	10/25/2013 23:30							Crew leave location for Service Center or another location.
Other	10/25/2013 23:30							Thank You for using Halliburton. Ed Arnold and Crew.

WPX - RWF 32-4 - 9 5/8" SURFACE



DH Density (ppg) Comb Pump Rate (bbl/min) PS Pump Press (psi) Pump Stg Tot (bbl)

- ① Start Job 8.33;0;5;0 ④ Pump Spacer 18.39;0;14;0 ⑦ Shutdown 11.51;0;88;60.1 ⑩ Slow Rate 8.43;4;362;80.2 ⑬ End Job n/a;n/a;n/a;n/a
- ② Prime Pumps 8.32;3.4;27;4.8 ⑤ Pump Lead Cement 8.36;3.9;94;0.1 ⑧ Drop Plug 11.62;0;14;60.1 ⑪ Bump Plug 8.43;1.9;567;87.2
- ③ Test Lines 8.31;0.2;1014;17 ⑥ Pump Tail Cement 12.59;7.1;250;0.1 ⑨ Pump Displacement 1.49;1.8;21;0.3 ⑫ Check Floats 8.44;0;152;87.3

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Created: 2013-10-25 20:44:51, Version: 2.0.606

[Edit](#)

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 10/25/2013 8:49:48 PM

Well: RWF 32-4

Representative: GARY VALLAD

Sales Order #: 900842094

ELITE #4: ED ARNOLD / PAUL SALAZAR

HALLIBURTON

Water Analysis Report

Company:	<u>WPX</u>	Date:	<u>10/25/2013</u>
Submitted by:	<u>ED ARNOLD</u>	Date Rec.:	<u>10/25/2013</u>
Attention:	<u></u>	S.O.#	<u>900842094</u>
Lease	<u>RWF</u>	Job Type:	<u>SURFACE</u>
Well #	<u>32-4</u>		

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7
Potassium (K)	<i>5000</i>	200 Mg / L
Calcium (Ca)	<i>500</i>	120 Mg / L
Iron (FE2)	<i>300</i>	3 Mg / L
Chlorides (Cl)	<i>3000</i>	0 Mg / L
Sulfates (SO ₄)	<i>1500</i>	<200 Mg / L
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-80</i>	53 Deg
Total Dissolved Solids		-- Mg / L

Respectfully: ED ARNOLD

Title: CEMENTING SUPERVISOR

Location: Grand Junction, CO

NOTICE: This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its use

Sales Order #: 900842094	Line Item: 10	Survey Conducted Date: 10/25/2013
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: GARY VALLAD		API / UWI: (leave blank if unknown) AFEYCYJ1UJJKHL5JVAAA
Well Name: RWF		Well Number: 32-4
Well Type: Development Well	Well Country: United States of America	
H2S Present:	Well State: Colorado	Well County: Garfield

Dear Customer,

We hope that you were satisfied with the service quality of this job performed by Halliburton. It is the aim of our management and service personnel to deliver equipment and service of a standard unmatched in the service sector of the energy industry.

Please take the time to let us know if our performance met with your satisfaction. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of Halliburton.

CUSTOMER SATISFACTION SURVEY

CATEGORY	CUSTOMER SATISFACTION RESPONSE	
Survey Conducted Date	The date the survey was conducted	10/25/2013
Survey Interviewer	The survey interviewer is the person who initiated the survey.	EDWARD ARNOLD (HX46731)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	GARY VALLAD
HSE	Was our HSE performance satisfactory? Circle Y or N	Yes
Equipment	Were you satisfied with our Equipment? Circle Y or N	Yes
Personnel	Were you satisfied with our people? Circle Y or N	Yes
Customer Comment	Customer's Comment	GOOD JOB

CUSTOMER SIGNATURE

Sales Order #: 900842094	Line Item: 10	Survey Conducted Date: 10/25/2013
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Customer Representative: GARY VALLAD		API / UWI: (leave blank if unknown) AFEYCYJ1UJJKHL5JVAAA
Well Name: RWF		Well Number: 32-4
Well Type: Development Well	Well Country: United States of America	
H2S Present:	Well State: Colorado	Well County: Garfield

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date	10/25/2013
The date the survey was conducted	

Cementing KPI Survey	
Type of Job	0
Select the type of job. (Cementing or Non-Cementing)	
Select the Maximum Deviation range for this Job	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
Total Operating Time (hours)	3
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
HSE Incident, Accident, Injury	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
Was the job purpose achieved?	Yes
Was the job delivered correctly as per customer agreed design?	
Operating Hours (Pumping Hours)	1.5
Total number of hours pumping fluid on this job. Enter in decimal format.	
Customer Non-Productive Rig Time (hrs)	0
Lost time due to Halliburton in the start, execution, or completion of an ordered service or product, or delays in a follow-on service. Enter in decimal format. 0 if none.	
Type of Rig Classification Job Was Performed	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
Number Of JSAs Performed	5
Number Of Jsas Performed	
Number of Unplanned Shutdowns	0
Unplanned shutdown is when injection stops for any period of time.	
Was this a Primary Cement Job (Yes / No)	Yes

Sales Order #: 900842094	Line Item: 10	Survey Conducted Date: 10/25/2013
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Customer Representative: GARY VALLAD		API / UWI: (leave blank if unknown) AFEYCJ1UJJKHL5JVAAA
Well Name: RWF		Well Number: 32-4
Well Type: Development Well	Well Country: United States of America	
H2S Present:	Well State: Colorado	Well County: Garfield

Primary Cement Job= Casing job, Liner job, or Tie-back job.	
Did We Run Wiper Plugs? Did We Run Top And Bottom Casing Wiper Plugs?	Top
Mixing Density of Job Stayed in Designed Density Range (0-100%) Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	99
Was Automated Density Control Used? Was Automated Density Control (ADC) Used ?	Yes
Pump Rate (percent) of Job Stayed At Designed Pump Rate Pump Rate range defined as +/- 1bbl/min. Calculation: Total BBLs of fluid pumped at the designed rate divided by Total BBLs of fluid pumped, multiplied by 100	99
Nbr of Remedial Sqz Jobs Rqd - Competition Number Of Remedial Squeeze Jobs Required After Primary Job Performed By Competition	0
Nbr of Remedial Plug Jobs Rqd - HES Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
Nbr of Remedial Sqz Jobs Rqd - HES Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0