Arrowhead Grayburg Unit C-108 Index Reference

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	ron U.S.A. Inc.	Arrowhead Grayburg Unit	
OPE	RATOR	LEASE	
WEL	L NO. FOOTAGE LOCATION	SECTION TOWNSHIP	RANGE
Prop	osed new injection well.		
	SCHEMATICS	TUBUL	AR DATA
	GL	Surface Casing	
	1300'	Size <u>8-5/8</u> TOC <u>Surf</u> Hole size <u>12-1/4"</u>	Cemented with 800 sx feet determined by Circ.
	2 3/8" IPC INJ. TBG.	Long String Size 5-1/2 " TOC Surf Hole size 7-7/8" Total Depth 4000'	Cemented with 800 sx feet determined by Circ.
	3600' - 3900' 4000'	Injection Interval 3600 feet to (perforated)	3900 feet
Tubi		IPC set in a Material) feet (or describe any other casing-	Nickel Plated Baker Model AD-1 Tension (Brand and Model) tubing seal).
Othe	er Data		
1.	Name of the injection formation Grayburg		
2.	Name of Field or Pool (if applicable) Arrowhead		
3.	Is this a new well drilled for injection? X Yes If no, for what purpose was the well originally drille	ed?	
4.	Has the well ever been perforated in any other zone(splug(s) used) No		
5.	Give the depth in and name of any overlying and/or Eumont, 3300' top of Langlie Mattix, 5500' top of I	r underlying oil or gas zones (pools) in thi	s area. 2400' top of Jalmat, 2600' top of

Chevro	n U.S.A. I	nc.			Arrowhead	Grayburg Unit	
OPERATOR			LEASE				
WELL	NO.	FOOTAG	E LOCATION		SECTION	TOWNSHIP	RANGE
Two str	ings casing	with oper	hole.				
	SCHE	MATICS				TUB	ULAR DATA
G	L = 34	60'			Surface Casing	1	
			290'		Size 9-5/8 TOC Surf Hole size		Cemented withsx feet determined bysx
					Long String Size5-1/2	, "	Cemented with 400 sx
					TOC 1546		feet determined by <u>Calc.</u>
					Hole size Total Depth		
			2 3/8" IP	C	Injection Inter	val	
		×	3680'		3680 (open hole)	feet to _	3900 feet

	TD	3900'					
Tubing	size	2-3/8"	lined with	IPC (Materia	n .	set in a _	Nickel Plated Baker Model AD-1 Tension (Brand and Model)
			packer at			e any other casir	
Other I		injection 1	formation <u>Graybur</u>	9			
2. N	ame of Fie	eld or Pool	(if applicable) A	rowhead			
3. Is	this a new	v well drill hat purpose	ed for injection?e was the well origin	Yes X Nally drilled? Oi	No Il Production		
			<u> </u>				
			name of any overly	ing and/or under	lying oil or gas :	zones (pools) in	this area. 2400' top of Jalmat, 2600' top of Drinkard.

Chevron U.S.A. Inc.		Arrowhead	Grayburg Unit	
OPERATOR		LEASE		
WELL NO. FOOTAG	GE LOCATION	SECTION	TOWNSHIP	RANGE
Two strings casing with casi	ing perforations.		***	
<u>SCHEMATICS</u>			TUBU	LAR DATA
GL=3476'		Surface Casing		
	358'	Size 8-5/8 TOC Surf Hole size		Cemented with 200 sx feet determined by Circ.
		Long String		
		Size $\frac{5-1/2}{\text{TOC}}$	3 '	Cemented with 425 sx feet determined by TS
	2 3/8" IPC INJ. TBG.	Hole size Total Depth		
		Injection Interven		
	3652' - 3850'	3652 (perforated)	feet to	3850 feet .
1 =	3900 '			
TD 3900'	3900			
10 3900				
Tubing size2-3/8"	lined with	IPC	set in a	Nickel Plated Baker Model AD-1 Tension
		(Material)		(Brand and Model)
	packer at 3560	feet (or describe	any other casing	-tubing seal).
Other Data				
	facestica Constant			
-				
2. Name of Field or Pool	l (if applicable) Arrowhe	ad		
	led for injection? Yes			
		ne(s)? List all such perforate		ive plugging detail (sacks of cement or bridge
		d/or underlying oil or gas zo of Blinebry, 6250' top of Tu		is area. 2400' top of Jalmat, 2600' top of Drinkard.

Chevron U.S.A. Inc.		Arrowhead Grayburg Ur	nit
OPERATOR	LEA	SE	
WELL NO. FOOTAGE LOCATION	SEC	TION TOWNSH	IP RANGE
Two strings casing with liner.			
SCHEMATICS		T	UBULAR DATA
GL = 3562	<u>Surfa</u>	ice Casing	
342	TOC	10-3/4 Surf size 12-1/4"	" Cemented withsx feet determined bysx
2 3/8"	110	String	
INJ. T	Size	5-1/2 Surface	" Cemented with 900 sx feet determined by Calc.
TOL @ 3715'		size <u>6-1/4"</u> 1 Depth <u>3930'</u>	 _
	Injec	tion Interval	
3800' -	•	3800 feet to forated)	o 3900 feet
w/ 50 sx:	set @ 3915' s cmt		
TD 3915'			
•			a Nickel Plated Baker Model AD-1 Tension (Brand and Model) asing-tubing seal).
Other Data			
1. Name of the injection formation <u>Gray</u>	burg		
2. Name of Field or Pool (if applicable)	Arrowhead		
3. Is this a new well drilled for injection? If no, for what purpose was the well o		uction	
Has the well ever been perforated in ar plug(s) used) No	=	-	nd give plugging detail (sacks of cement or bridge
5. Give the depth in and name of any ov Eumont, 3300' top of Langlie Mattix,			in this area. <u>2400' top of Jalmat, 2600' top of</u> p of Drinkard.

Chevron U.S.A. Inc.	·	Arr	owhead Gray	burg Unit			
OPERATOR		LEASE					
WELL NO. FOOTA	GE LOCATION	SECTIO	ON TO	OWNSHIP	RA	NGE	
Three strings with liner.		······································					
SCHEMATICS				TUBU	LAR DATA		
GL = 3529'		Surface	Casing				
	276'	тос _	10-3/4 Surf ze 15*			vith 225 ned by Circ.	sx
4	1381'	<u>Interme</u>	diate Casing				
	7 2 3/8" IPC INJ. TBG.	TOC _	7-5/8 Surface ze 9-7/8	8"		vith 425 ined by Calc	sx
			5-1/2 Surface			vith <u>425</u> ined by <u>Calc.</u>	sx
	TOL @ 3700'	Hole si	ze 6-3/4 Pepth 3840		ica decim	inco by <u>Care.</u>	
TD 30/0	3743' - 3839 4" linerset (w/ 30 sxs cmt	3 (perform	n Interval 743 ated)	_ feet to	3839	feet	
TD 3840 Tubing size 2-3/8"		IPC	· · · · · · · · · · · · · · · · · · ·	_ set in a	Nickel Plated Bak	er Model AD-1 Te	nsion_
	packer at <u>3650</u>	(Material) Description feet (or	describe any	other casing	(Brand and stubing seal).	d Model)	
Other Data							
_	formation Grayburg						
•	l (if applicable) Arrowhe	ead.					
					· · ·		
	lled for injection? Yes		on				
	n perforated in any other zo						r bridge
	I name of any overlying an Langlie Mattix, 5500' top					op of Jalmat, 2600	' top of

	ron U.S.A. Inc.		d Grayburg Unit	
OPE	RATOR	LEASE		
WEL	I. NO. FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
Three	strings with open hole.			
	<u>SCHEMATICS</u>		TUBU	LAR DATA
G	L = 3519'	Surface Casin	g	
	274'	Size <u>10-3</u> TOC <u>Sur</u> Hole size		Cemented withsx feet determined bysx
	1282'			
		Intermediate (Casing	
	2 3/8 IPC INJ. TBG.	Size 7-5/ TOC Sur Hole size	f	Cemented with 425 sx feet determined by Calc.
		Long String		
	3739'	Size <u>5-1/</u> TOC <u>Sur</u>		Cemented with 425 sx feet determined by Calc.
		Hole size Total Depth_		
	{	Injection Inter	val .	
		3739 (open hole)	feet to	3825 feet
	TD 3825'			
Tapi		(Material)		Nickel Plated Baker Model AD-1 Tension (Brand and Model)
	packer at3640	feet (or descri	be any other casing	-tubing seal).
Othe	r <u>Data</u>			
1	Name of the injection formation Grayburg			
2	Name of Field or Pool (if applicable) Arrowhead	<u>i</u>	<u></u>	
3	Is this a new well drilled for injection? Yes If no, for what purpose was the well originally dril			
4.	Has the well ever been perforated in any other zone plug(s) used) No	•	•	ive plugging detail (sacks of cement or bridge
5.	Give the depth in and name of any overlying and/ Eumont, 3300' top of Langlie Mattix, 5500' top of			

Chevron U.S.A. Inc.	Arrowhead	d Grayburg Unit	
OPERATOR	LEASE		
WELL NO. FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
Three strings with perforations.			
SCHEMATICS		TUB	ULAR DATA
GL = 3525'	Surface Casing	g	
316' 2670'	Size 12-3 TOC Suri	f	Cemented withsx feet determined bysx
2 3/8" IPC INJ TBG	Intermediate C		
	Size 8-5/2 TOC Sur Hole size	<u>f</u>	Cemented with 320 sx feet determined by Circ.
事 3713' - 3916'	Long String		
CIBP @ 4026'	Size <u>5-1/</u> TOC <u>900</u>		Cemented with 800 sx feet determined by CBL
Paddock 5206' - 5215'	Hole size Total Depth_		
Blinebry = 5539' - 5928'	Injection Inter	val	
	(perforated)	feet to	3916 feet
TD 6000'			N' I I Discol D to M I I A D I T
Tubing size 2-3/8" lined with IPC (Materia			Nickel Plated Baker Model AD-1 Tension (Brand and Model)
packer at3620	_ feet (or describ	be any other casin	ng-tubing seal).
Other Data			
1. Name of the injection formation <u>Grayburg</u>	 		
2. Name of Field or Pool (if applicable) Arrowhead			
3. Is this a new well drilled for injection? Yes X ! If no, for what purpose was the well originally drilled? O			
4. Has the well ever been perforated in any other zone(s)? Lis plug(s) used) Yes, Paddock 5206'-5215', squeezed with 1 Blinebry 5539'-5928', CIBP @ 4026'			give plugging detail (sacks of cement or bridge
5. Give the depth in and name of any overlying and/or under Eumont, 3300' top of Langlie Mattix, 5500' top of Blinebr			