OSAGE TABULATION OF WELLS WITHIN 1/4 MILE OF PROPOSED INJECTION WELL
WHICH PENETRATE THE INJECTION ZONE

Proposed Inj Well _____

****

Well Name NBU 22-1 Company Name Sinclair Oil & Gas Date Drilled 6/18/1923 Depth 3010 '

Location 300 ' F S L & 300 ' F W L, NE /4, Sec. 15 , T 27 N, R 05 E Status Shut In Oil

Elevation 1127 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	8 5/8 "	2328 '		'	
"	7 "	2814 '		'	
"	5 1/2 "	Liner '	2795' - 2971'	'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: Burbank (Openhole 2971' - 3010')

****

Well Name NBU 22-2 Company Name Sinclair Oil & Gas Date Drilled 7/10/1923 Depth 3042 '

Location 980 ' F S L & 300 ' F W L, NE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 10/17/1964

Elevation _____ [ ] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	15 1/2 "	865 '		'	Spot 50 sx reg cmt w/ 30% Diacel "D" @ 2773'. WOC. Part and POOH w/ 2724' 7" csg. Fill hole w/ heavy mud. Spot 10 sx cmt @ 2670'. WOC. Part and POOH w/ 2026' 8 5/8" csg. Part and POOH w/ 425' 16" csg. Spot 15 sx reg cmt w/ 30% Diacel "D" @ 110'. Capped surface w/ 5 sx reg. cmt.
"	12 1/2 "	1245 '		'	
"	10 "	1460 '		'	
"	8 5/8 "	2352 '		'	
	7 "	2814 '			
"	5 1/2 "	Liner '	2795' - 2962'	'	

Formations Open To Wellbore: None

****

Well Name NBU 22-3 Company Name Sinclair Oil and Gas Date Drilled 1/28/1924 Depth 3053 '

Location 930 ' F N L & 300 ' F W L, NE /4, Sec. 15 , T 27 N, R 05 E Status Oil

Elevation 1136 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	15 1/2 "	905 '		'	
"	8 5/8 "	2352 '		'	
"	7 "	2825 '		'	
"	5 1/2 "	Liner '	2815' - 2981'	'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: Burbank (Openhole 2957' - 3053')

****

OSAGE TABULATION OF WELLS WITHIN 1/4 MILE OF PROPOSED INJECTION WELL
WHICH PENETRATE THE INJECTION ZONE

Proposed Inj Well _____

****

Well Name NBU 22-4 Company Name Sinclair Oil & Gas Date Drilled 7/1/1923 Depth 3027 '

Location 300 ' F N L & 2340 ' F E L, NE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 12/3/1962

Elevation 3027 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	20 "	19 '		'	Spot 115 sx reg cmt w/ 30% Diacel "D" & 2% CC @ 2998'. WOC. TOC @ 2542'. Fill hole w/ heavy mud. Part and POOH w/ 797' 5 1/2" csg. Part and POOH w/ 906' 8 5/8" csg. Mudded hole to surf.
"	15 1/2 "	922 '		'	
"	10 "	1370 '		'	
"	8 5/8 "	2176 '		'	
"	7 "	2407 '			
"	5 1/2 "	2979 '		'	

Formations Open To Wellbore: None

****

Well Name NBU 22-5 Company Name Sinclair Oil & Gas Co. Date Drilled 1/27/1924 Depth 3049 '

Location 300 ' F S L & 973 ' F W L, NE /4, Sec. 15 , T 27 N, R 05 E Status Oil

Elevation 1129 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	15 1/2 "	902 '		'	
"	8 5/8 "	2320 '		'	
"	7 "	2815 '		'	
"	5 1/2 "	Liner '	2799' - 2972'	'	
"	"	'		'	

Formations Open To Wellbore: Burbank (Openhole 2972' - 3049')

****

Well Name NBU 22-6 Company Name Sinclair Oil & Gas Date Drilled 9/3/1923 Depth 3042 '

Location 300 ' F S L & 980 ' F E L, NE /4, Sec. 15 , T 27 N, R 05 E Status P & A'd 5/1/1998

Elevation 1131 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	20 "	28 '		'	Fill hole w/ heavy mud. Spot 100 sx 50/50 poz cmt @ 3015'. WOC. Circ 275 sx cmt from 2100' to surf. WOC. Topped of well w/ 175 sx 50/50 poz cmt. Cut off all strings 3' below GL and restore loc.
"	15 1/2 "	450 '		'	
"	10 "	1400 '		'	
"	8 5/8 "	1860 '		'	
"	7 "	2355 '		'	
"	5 1/2 "	2973 '		'	

Formations Open To Wellbore: None

****

OSAGE TABULATION OF WELLS WITHIN 1/4 MILE OF PROPOSED INJECTION WELL
WHICH PENETRATE THE INJECTION ZONE

Proposed Inj Well _____

****

Well Name NBU 22-7 Company Name Sinclair Oil and Gas Date Drilled 1/16/1924 Depth 3055 '

Location 300 ' F N L & 300 ' F E L, NE /4, Sec. 15 , T 27 N, R 05 E Status Oil

Elevation 1145 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	15 1/2 "	488 '		'	
"	8 5/8 "	2335 '		'	
"	7 "	2860 '		'	
"	5 1/2 "	2810 '	150 sx 2% CC cmt	'	
	5 1/2 "	Liner '	From 2812' to 2986'		
"	"	'		'	

Formations Open To Wellbore: Burbank (Openhole 2986' - 3055')

****

Well Name NBU 22-8 Company Name Sinclair Oil & Gas Date Drilled 1/17/1924 Depth 3145 '

Location 300 ' F N L & 300 ' F E L, NE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 1/1/1963

Elevation 1154 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	20 "	20 '		'	Spot 65 sx cmt w/ 30% Diacel "D" & 2% CC @ 3109'. WOC. TOC @ 3015'. Fill hole w/ heavy mud. Part and POOH w/ 2820' 7" csg. Spot 10 sx cmt @ 2750'. WOC. Part and POOH w/ 1597' 8 5/8" csg. Mudded hole to surface.
"	15 1/2 "	1019 '		'	
"	12 1/2 "	1240 '	Only 122' in length	'	
"	8 5/8 "	2475 '		'	
"	7 "	2951 '			
"	5 1/2 "	Liner '	2925' - 3100	'	

Formations Open To Wellbore: None

****

Well Name NBU 22-9 Company Name Sinclair Oil & Gas Date Drilled 3/7/1924 Depth 3119 '

Location 300 ' F S L & 982 ' F N L, NE /4, Sec. 15 , T 27 N, R 05 E Status Shut In Oil

Elevation 1189 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	12 1/2 "	928 '		'	
"	8 5/8 "	2390 '		'	
"	7 "	3033 '		'	
"	5 1/2 "	Liner '	3013' - 3054'	'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: Burbank (Openhole 3054' - 3119')

****

OSAGE TABULATION OF WELLS WITHIN 1/4 MILE OF PROPOSED INJECTION WELL
WHICH PENETRATE THE INJECTION ZONE

Proposed Inj Well _____

****

Well Name NBU 22-10 Company Name Sinclair Oil & Gas Date Drilled 3/26/1924 Depth 3088 '

Location 300 ' F E L & 980 ' F S L, NE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 8/20/1962

Elevation 1166 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	20 "	36 '		'	Spot 25 sx reg cmt w/ 30% Diacel "D" & 2% CC @3020. WOC. TOC @ 2675'. Part and POOH w/ 2178' 5 1/2" csg. Fill hole w/ heavy mud. Part and POOH w/ 1516' 7" csg. Mudded hole to surf.
"	15 1/2 "	190 '		'	
"	8 5/8 "	860 '		'	
"	7 "	2640 '		'	
"	5 1/2 "	3016 '		'	

Formations Open To Wellbore: None

****

Well Name NBU 22-11 Company Name Sinclair Oil & Gas Date Drilled 4/7/1924 Depth 3054 '

Location 980 ' F S L & 973 ' F W L, NE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 8/9/1996

Elevation 1134 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	12 1/2 "	1217 '		'	Part and POOH w/ 822' 4 1/2" tbg. Part and POOH w/ 802' 8 5/8" csg. Spot 300 sx 50-50 poz cmt plug from 880' - 400'. WOC. Spot 500 sx 50-50 poz cmt from 400' to surf. Restore loc.
"	8 5/8 "	2335 '		'	
"	7 "	2843 '		'	
"	4 1/2 "	3009 '	Cmt w/ 114 sx reg w/ 30% Diacel "D"	'	
"	"	'		'	

Formations Open To Wellbore: None

****

Well Name NBU 22-12 Company Name Sinclair Oil & Gas Date Drilled 3/17/1924 Depth 3069 '

Location 982 ' F N L & 973 ' F W L, NE /4, Sec. 15 , T 27 N, R 05 E Status P & A'd 10/10/1964

Elevation 1147 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	20 "	20 '		'	Spot 50 sx reg 30% Diacel "D" @ 2904'. WOC. Part and POOH w/ 2680' 7" csg. Fill hole w/ heavy mud. Spot 10 sx cmt w/ 30% Diacel "D" @ 2620. WOC. Part and POOH w/ 1445' 8 5/8" csg. Spot 15 sx cmt 2/ 30% Daicel "D" @ 110'. Capped surface w/ 5 sx reg cmt.
"	15 1/2 "	405 '		'	
"	12 1/2 "	705 '		'	
"	8 5/8 "	2360 '		'	
"	7 "	2995 '			
"	5 1/2 "	Liner '	2975' - 3001'	'	
"	"	'		'	

Formations Open To Wellbore: None

****

OSAGE TABULATION OF WELLS WITHIN 1/4 MILE OF PROPOSED INJECTION WELL
WHICH PENETRATE THE INJECTION ZONE

Proposed Inj Well _____

****

Well Name NBU 22-13 Company Name Sinclair Oil and Gas Date Drilled 3/26/1924 Depth 3080 '

Location 300 ' F N L & 973 ' F W L, NE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 12/11/1962

Elevation _____ ☐ GL ☐ KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	15 1/2 "	700 '		'	Spot 65 sx reg w/ 30% Diacel "D" cmt & 2% CC @ 3029. WOC. TOC @ 3000'. Part and POOH 2500'. Fill hole w/ heavy mud. Spot 10 sx cmt @ 2500'. Part and POOH w/ 1603' 8 5/8" csg. Mudded hole to surf.
"	8 5/8 "	2365 '		'	
"	5 1/2 "	3012 '		'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: None

****

Well Name NBU 22-14 Company Name Sinclair Oil & Gas Date Drilled 3/31/1924 Depth 3104 '

Location 300 ' F N L & 973 ' F E L, NE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 12/20/1962

Elevation 1324 ☒ GL ☐ KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	15 1/2 "	90 '		'	Spot 70sx reg w/ 30% Diacel "D" & 2% CC @ 3050'. WOC. TOC @ 2950'. Part and POOH w/ 2707' 5 1/2" csg. Fill hole w/ heavy mud. Spot 10 sx cmt @ 2700'. WOC. Part and POOH w/ 1614' 7" csg. Mudded hole to surf.
"	7 "	2709 '		'	
"	5 1/2 "	3043 '		'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: None

****

Well Name NBU 22-15 Company Name Sinclair Oil and Gas Date Drilled 4/5/1924 Depth 3091 '

Location 982 ' F N L & 973 ' F E L, NE /4, Sec. 15 , T 27 N, R 05 E Status Oil

Elevation 1165 ☒ GL ☐ KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	15 1/2 "	935 '		'	
"	12 1/2 "	1240 '		'	
"	8 5/8 "	1605 '		'	
"	7 "	2340 '		'	
"	5 1/2 "	3032 '	cmt w/ 40 sx 30% Diacel "D"	'	
"	"	'		'	

Formations Open To Wellbore: Burbank (Openhole 3032' - 3091')

****

OSAGE TABULATION OF WELLS WITHIN 1/4 MILE OF PROPOSED INJECTION WELL
WHICH PENETRATE THE INJECTION ZONE

Proposed Inj Well _____

****

Well Name NBU 22-16 Company Name Sinclair Oil and Gas Date Drilled 4/20/1924 Depth 3078 '

Location 980 ' F S L & 973 ' F E L, NE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 1/27/1939

Elevation _____ ☐ GL ☐ KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	18 "	18 '		'	Spot cmt from 3078' - 2912'. Fill hole w/ heavy mud. Part and POOH w/ 2819' 7" csg. Part and POOH w/ 1892' 8 5/8" csg. Filled hole and placed cmt cap on top.
"	15 1/2 "	181 '		'	
"	8 5/8 "	2325 '		'	
"	7 "	2835 '		'	
"	5 1/2 "	Liner '	2815' - 3006'	'	

Formations Open To Wellbore: None

****

Well Name NBU 22-W23 Company Name Phillips Petroleum Co. Date Drilled 10/2/1962 Depth 3086 '

Location 890 ' F S L & 715 ' F E L, NE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 7/5/1995

Elevation 1147 ☒ GL ☐ KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	8 5/8 "	117 '	100 sx	'	Spot 10 sx class A cmt @ 2500'. Fill hole w/ heavy gel. WOC. TOC @ 2330'. Part and POOH w/ 498' 4 1/2" csg. Spot 240 sx class A cmt and circ to surface. Cut 8 5/8 csg 3' from GL and capped well and restored location
"	4 1/2 "	3049 '	135 sx w/ 30% Diacel "D"	'	
"	"	'		'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: None

****

Well Name NBU 22-W27 Company Name Phillips Petroleum Co. Date Drilled 11/27/1962 Depth 3133 '

Location 420 ' F N L & 715 ' F E L, NE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 1/8/1981

Elevation 1205 ☒ GL ☐ KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	8 5/8 "	120 '	100 sx	'	Pmp 300 sx reg cmt. WOC. TOC @ 617'. Filled hole w/ heavy mud. Spot 80 sx reg cmt @ 160'. TOC 11'. Cut off csg below ground level and capped w/ cemnt.
"	4 1/2 "	3091 '	135 sx w/ 30% Diacel "D"	'	
"	"	'		'	
"	"	'		'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: None

****

OSAGE TABULATION OF WELLS WITHIN 1/4 MILE OF PROPOSED INJECTION WELL
WHICH PENETRATE THE INJECTION ZONE

Proposed Inj Well _____

****

Well Name NBU 30-1 Company Name Waite Phillips Co. Date Drilled 7/21/1923 Depth 3085 '

Location 300 ' F S L & 300 ' F W L, SE /4, Sec. 15 , T 27 N, R 05 E Status Shut In Oil

Elevation 1185 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	8 5/8 "	2380 '		'	
"	7 "	2851 '		'	
"	5 1/2 "	Liner '	2826' - 3055'	'	
"	"	'	123' of 5 1/2" csg in hole; top @ 2918'. 2 sx cmt @ 2905'	'	
"	"	'		'	

Formations Open To Wellbore: Burbank (Open Hole 3055' - 3085)

****

Well Name NBU 30-2 Company Name Waite Phillips Co. Date Drilled 9/22/1923 Depth 3071 '

Location 975 ' F S L & 300 ' F W L, SE /4, Sec. 15 , T 27 N, R 05 E Status Oil Producer

Elevation 1127 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	8 5/8 "	2515 '		'	
"	7 "	2806 '		'	
"	5 11/2 "	Liner '	2796' - 3014'	'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: Burbank (Openhole 3014' - 3071')

****

Well Name NBU 30-3 Company Name Waite Phillips Co. Date Drilled 7/9/1923 Depth 3041 '

Location 975 ' F N L & 300 ' F W L, SE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 2/27/1932

Elevation 1135 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	20 "	20 '		'	Fill hole w/ hvy mud. Part and POOH w/ 20' 20" csg; 863' 15 1/2" csg; 1264' 12 1/2" csg; 930' 10" csg 2584' 8 5/8" csg; 2825' 7" csg; and 2628' 5 1/2" csg. Fill w/ cement to top of liner, mud to top of ground, and cap with cement.
"	15 1/2 "	908 '		'	
"	10 "	'	690 left in hole	'	
"	8 5/8 "	2584 '		'	
"	7 "	2825 '		'	
"	5 1/2 "	3008 '		'	

Formations Open To Wellbore: None

****

OSAGE TABULATION OF WELLS WITHIN 1/4 MILE OF PROPOSED INJECTION WELL
WHICH PENETRATE THE INJECTION ZONE

Proposed Inj Well _____

****

Well Name NBU 30-4 Company Name Waite Phillips Co. Date Drilled 6/21/1923 Depth 3030 '

Location 300 ' F N L & 300 ' F W L, SE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 7/16/1965

Elevation 1142 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	20 "	41 '		'	Fill hole w/ hvy mud. Part and POOH w/ 2428' 7" csg. Spot 10 sx cmt @ 2380'. WOC. Part and POOH w/ 1110' 8 5/8" csg. Dmpd 45 sx cmt @ 125' & capped w/ 5 sx cmt.
"	8 5/8 "	2320 '		'	
"	7 "	2826 '		'	
"	5 1/2 "	Liner '	2801' - 2969'	'	
"	"	'		'	

Formations Open To Wellbore: None

****

Well Name NBU 30-5 Company Name Mid--Kansas Oil and Ga Date Drilled 1/24/1924 Depth 3079 '

Location 300 ' F N L & 974 ' F W L, SE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 10/12/1962

Elevation 1173 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	15 1/2 "	'	534' in hole	'	Fill hole w/ hvy mud. Spot 60 sx cmt w/ 30% Diacel "D" @ 3030'. WOC. TOC @ 2800'. Part and POOH w/ 2709' 7" csg. Spot 10 sx cmt @ 2600. WOC. Part and POOH w/ 1871' 8 5/8" csg. Part and POOH w/ 1104' 13" csg. Mudded hole to surf.
"	12 1/2 "	1279 '		'	
"	8 5/8 "	2356 '		'	
"	7 "	2858 '		'	
"	5 1/2 "	Liner '	2833' - 2997'	'	

Formations Open To Wellbore: None

****

Well Name NBU 30-6 Company Name Waite Phillips Co. Date Drilled 8/6/1923 Depth 3068 '

Location 300 ' F N L & 974 ' F E L, SE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 10/23/1964

Elevation 1158 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	15 1/2 "	18 '		'	Fill hole w/ hvy mud. Cmt form. Through pkr @ 2794' w/ 60 sx cmt w/ 30% Diacel "D". Part and POOH w/ 2502' 7" csg. Dmp 10 sx reg cmt @ 2460'. Part and POOH w/ 1410' 8 5/8" csg. Pmp 15 sx reg cmt w/ 30% Diacel "D" @ 110'. Capped surf. w/ 5 sx reg cmt.
"	10 "	673 '		'	
"	8 5/8 "	2376 '		'	
"	7 "	2870 '		'	
"	5 1/2 "	Liner '	2850' - 2992'	'	
"	"	'		'	

Formations Open To Wellbore: None

****

OSAGE TABULATION OF WELLS WITHIN 1/4 MILE OF PROPOSED INJECTION WELL
WHICH PENETRATE THE INJECTION ZONE

Proposed Inj Well _____

****

Well Name NBU 30-7 Company Name Mid--Kansas Oil and Ga Date Drilled 1/24/1924 Depth 3078 '

Location 300 ' F N L & 300 ' F E L, SE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 8/14/1962

Elevation 1135 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	20 "	12 '		'	Fill hole w/ hvy mud. Spot 60 sx cmt w/ 30% Diacel "D" @ 3023'. WOC. TOC @ 2444'. Part and POOH w/ 2406' 7" csg. Spot 10 sx cmt @ 2390. WOC. Part and POOH w/ 1913' 8 5/8" csg. Part and POOH w/ 1496' 10 3/4" csg. Part and POOH w/ 448' 16" csg. Mudded hole to surf.
"	15 1/2 "	917 '		'	
"	10 "	1687 '		'	
"	8 5/8 "	2345 '		'	
"	7 "	2867 '		'	
"	5 1/2 "	Liner '	2847' - 3024'	'	

Formations Open To Wellbore: None

****

Well Name NBU 30-8 Company Name Mid--Kansas Oil and Ga Date Drilled 1/24/1924 Depth 3135 '

Location 980 ' F N L & 300 ' F E L, SE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 9/8/1931

Elevation 1192 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	15 1/2 "	951 '		'	Fill hole w/ hvy mud. POOH w/ 951' 15 1/2" csg. POOH w/ 1441' 12 1/2" csg. POOH w/ 1852' 10" csg. Part and POOH w/ 1823' 8 5/8" csg. Part and POOH w/ 2704' 7" csg. Cmt from 3045' - 2720'. Mud laden fluid from 2720' - surf.
"	12 1/2 "	1441 '		'	
"	10 "	1852 '		'	
"	8 5/8 "	2413 '		'	
"	7 "	2877 '		'	
"	5 1/2 "	Liner '	2852' - 3046'	'	

Formations Open To Wellbore: None

****

Well Name NBU 30-8A Company Name Phillips Petroleum Com Date Drilled 3/19/1962 Depth 3130 '

Location 927 ' F N L & 353 ' F E L, SE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 5/21/1969

Elevation 1191 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	10 3/4 "	114 '	100 sx	surf '	Fill hole w/ hvy mud. POOH w/ 1332' 7" csg. Pmp 100 sx reg cmt to 125'. Spot 25 sx additional cmt. Filled to bottom of cellar w/ mud and capped w/ 5 sx reg cmt.
"	7 "	3072 '	40 sx w/ 1150# Diacel "D"	'	
"	"	'		'	
"	"	'		'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: None

****

OSAGE TABULATION OF WELLS WITHIN 1/4 MILE OF PROPOSED INJECTION WELL
WHICH PENETRATE THE INJECTION ZONE

Proposed Inj Well _____

****

Well Name NBU 30-9 Company Name Mid--Kansas Oil and Ga Date Drilled 4/5/1923 Depth 3169 '

Location 980 ' F S L & 300 ' F E L, SE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 5/7/1962

Elevation 1225 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	8 5/8 "	2436 '		'	Fill hole w/ hvy mud. Spot 50 sx cmt w/ 1450 # Diacel "D" @ 3120'. WOC. TOC @ 2670'. Part and POOH w/ 2663' 7" csg. Spot 10 sx cmt @ 2650'. WOC. Part and POOH w/ 1299' 8 5/8" csg. Mudded hole to surf.
"	7 "	2916 '		'	
"	5 1/2 "	Liner '	2896' - 3145'	'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: None

****

Well Name NBU 30-10 Company Name Mid--Kansas Oil and Ga Date Drilled 1/25/1924 Depth 3113 '

Location 300 ' F S L & 300 ' F E L, SE /4, Sec. 15 , T 27 N, R 05 E Status Shut In Oil

Elevation 1206 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	15 1/2 "	981 '		'	
"	8 5/8 "	2385 '		'	
"	7 "	2806 '		'	
"	5 1/2 "	Liner '	2761' - 3032'	'	
"	"	'		'	

Formations Open To Wellbore: Burbank (Openhole 3032' - 3113')

****

Well Name NBU 30-11 Company Name Waite Phillips Co. Date Drilled 6/23/1923 Depth 3095 '

Location 300 ' F S L & 978 ' F E L, SE /4, Sec. 15 , T 27 N, R 05 E Status Shut In Oil

Elevation 1183 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	20 "	34 '		'	
"	15 1/2 "	960 '		'	
"	12 1/2 "	'	357 in hole	'	
"	10 "	'	375 in hole	'	
"	8 5/8 "	2337 '		'	
"	7 "	2725 '		'	
"	5 1/2 "	Liner '	2775' - 3015'	'	

Formations Open To Wellbore: Burbank (Openhole 3015' - 3095')

****

OSAGE TABULATION OF WELLS WITHIN 1/4 MILE OF PROPOSED INJECTION WELL
WHICH PENETRATE THE INJECTION ZONE

Proposed Inj Well _____

****

Well Name NBU 30-12 Company Name Waite Phillips Co. Date Drilled 8/6/1923 Depth 3110 '

Location 300 ' F S L & 978 ' F W L, SE /4, Sec. 15 , T 27 N, R 05 E Status Shut In Oil

Elevation 1197 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	15 1/2 "	972 '		'	
"	12 1/2 "	1185 '		'	
"	10 "	1446 '		'	
"	8 5/8 "	2385 '		'	
"	7 "	2850 '		'	
"	5 1/2 "	Liner '	2837' - 3065'	'	

Formations Open To Wellbore: Burbank (Openhole 3065' - 3110')

****

Well Name NBU 30-13 Company Name Mid--Kansas Oil and Ga Date Drilled 5/10/1924 Depth 3092 '

Location 977 ' F S L & 977 ' F W L, SE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 8/22/1931

Elevation 1178 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	8 5/8 "	2530 '		'	Fill hole w/ hvy mud. Part and POOH w/ 2850' 7" csg. Part and POOH w/ 2198' 8 5/8" csg. POOH w/ 1420' 10" csg. POOH w/ 1265' 12 1/2" csg. POOH w/ 954' 15 1/2" csg. Cmt from 3092' - 2871'. Mud laden fluid from 2871' to surf.
"	7 "	2871 '		'	
"	5 1/2 "	Liner '	2851' - 3042'	'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: None

****

Well Name NBU 30-14 Company Name Mid--Kansas Oil and Ga Date Drilled 4/17/1924 Depth 3087 '

Location 976 ' F N L & 976 ' F W L, SE /4, Sec. 15 , T 27 N, R 05 E Status Shut In Oil

Elevation 1157 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	10 "	1645 '	pull 769' 9/28/1943	'	
"	8 5/8 "	2352 '		'	
"	7 "	2858 '		'	
"	5 1/2 "	Liner '	2824' - 3003'	'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: Burbank (Openhole 3003' - 3087')

****

OSAGE TABULATION OF WELLS WITHIN 1/4 MILE OF PROPOSED INJECTION WELL
WHICH PENETRATE THE INJECTION ZONE

Proposed Inj Well _____

****

Well Name NBU 30-15 Company Name Mid--Kansas Oil and Ga Date Drilled 4/14/1924 Depth 3103 '

Location 976 ' F N L & 976 ' F E L, SE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 12/31/1927

Elevation 1196 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	8 5/8 "	2389 '		'	Fill hole w/ hvy mud. Part and POOH w/ 2312' 7" csg. Part and POOH w/ 1389' 8 5/8" csg. POOH w/ 1471' 10" csg; 1247' 12 1/2" csg; 781' 15 1/2" csg; and 20' 20" csg. Filled w/ mud laden fluid from bottom to top and capped w/ cmt.
"	7 "	2860 '		'	
"	5 1/2 "	Liner '		'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: None

****

Well Name NBU 30-15A Company Name Phillips Petroleum Com Date Drilled 6/22/1962 Depth 3131 '

Location 976 ' F N L & 916 ' F E L, SE /4, Sec. 15 , T 27 N, R 05 E Status Shut In Oil

Elevation 1195 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	10 3/4 "	119 '	Cmt w/105 sx	surf '	
"	7 "	3088 '	Cmt w/40 sx w/ 30% Diacel "D"	'	
"	"	'		'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: Burbank (Open Hole 3088' - 3131')

****

Well Name NBU 30-16 Company Name Mid--Kansas Oil and Ga Date Drilled 4/25/1924 Depth 3148 '

Location 978 ' F S L & 978 ' F E L, SE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 2/14/1962

Elevation 1227 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	15 1/2 "	1050 '	392'	'	Fill hole w/ hvy mud. Cmt from 3120' w/ 75 sx cmt w 2125# Diacel "D". WOC. TOC @ 2614'. Part and POOH w/ 2575' 7" csg. Spot 10 sx cmt @ 2530'. WOC. Part and POOH w/ 1707' 8 5/8" csg. Mudded hole to surf.
"	8 5/8 "	2425 '		'	
"	7 "	2892 '		'	
"	5 1/2 "	Liner '	2872' - 3090'	'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: None

****

OSAGE TABULATION OF WELLS WITHIN 1/4 MILE OF PROPOSED INJECTION WELL
WHICH PENETRATE THE INJECTION ZONE

Proposed Inj Well _____

****

Well Name NBU 30-17 Company Name Phillips Petroleum Com Date Drilled 7/6/1963 Depth 3135 '

Location 1550 ' F S L & 2310 ' F W L, SE /4, Sec. 15 , T 27 N, R 05 E Status Shut In Oil

Elevation 1194 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	10 3/4 "	100 '	Cmt w/100 sx	Surface '	
"	7 "	3075 '	Cmt /75 sx	2300 '	
"	"	'		'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: Burbank (Openhole 3075' - 3135')

****

Well Name NBU 30-W22 Company Name Phillips Petroleum Com Date Drilled 9/6/1961 Depth 3123 '

Location 890 ' F S L & 1005 ' F W L, SE /4, Sec. 15 , T 27 N, R 05 E Status P&A'd 9/30/1989

Elevation 1188 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	8 5/8 "	118 '	Cmt w/110 sx	surf '	Pmp 35 sx reg cmt @ 873'. TOOH w/ 340' 4 1/2" csg. Pmp 18 sx Howco Gel. Pmp 16 Class H reg. cmt.Leveled Loc.
"	4 1/2 "	3086 '	Cmt w/134 sx w/ 3750# Diacel "D"	'	
"	"	'		'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: None

****

Well Name NBU 30-W23 Company Name Phillips Petroleum Com Date Drilled 8/31/1961 Depth 3187 '

Location 890 ' F S L & 715 ' F E L, SE /4, Sec. 15 , T 27 N, R 05 E Status Injection Well

Elevation 1249 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	8 5/8 "	128 '	Cmt w/120 sx reg	surf '	
"	4 1/2 "	3135 '	Cmt w/134 sx w/ 3750 # Diacel "D". Cmt between 8 5/8" & 4 1/2" csg from 423' to surf w/215 sx reg to surface	1600 Surface '	
"	3 1/2 "	3106 '	Cmt w/200 sx reg, 2% Gel	'	
"	"	'		'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: Burbank (Open Hole 3135' - 3187')

****

OSAGE TABULATION OF WELLS WITHIN 1/4 MILE OF PROPOSED INJECTION WELL
WHICH PENETRATE THE INJECTION ZONE

Proposed Inj Well _____

****

Well Name NBU 30-W25 Company Name Phillips Petroleum Co. Date Drilled 3/11/1962 Depth 3080 '

Location 425 ' F N L & 565 ' F W L, SE /4, Sec. 15 , T 27 N, R 05 E Status Injection Well

Elevation 1161 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	8 5/8 "	122 '	Cmt w/110 sx	surf '	
"	4 1/2 "	3026 '	Cmt w/134 sx 2/ 30% Diacel "D"	'	
"	"	'	Spot 10 sx cmt @ 155'. Pmp 40 sx cmt and filled annulus. Drill out cmt. Pmp 50 sx to circ. Pmp 80 sx reg cmt to fill annulus. Pmp 425 sx cmt to sqz from 117' to surf. WOC.	'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: Burbank (Open Hole 3026' - 3080')

****

Well Name NBU 30-W27 Company Name Phillips Petroleum Co. Date Drilled 3/24/1962 Depth 3093 '

Location 425 ' F N L & 635 ' F E L, SE /4, Sec. 15 , T 27 N, R 05 E Status Injection Well

Elevation 1154 [X] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	8 5/8 "	117 '	Cmt w/100 sx	Surf '	
"	4 1/2 "	3042 '	Cmt w/134 sx w/ 30% Diacel "D"	'	
"	"	'		'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: Burbank (Open Hole 3042' - 3093')

****

Well Name _____ Company Name _____ Date Drilled _____ Depth _____ '

Location ____ ' F ___ L & ' F ___ L, ____ /4, Sec. ____ , T ____ N, R ___ E Status _____

Elevation _____ [ ] GL [ ] KB

Hole Size	Casing Size	Landed Depth	Cement & Additive Data	Top of Cement	If well is TA or P&A Describe How:
"	"	'		'	
"	"	'		'	
"	"	'		'	
"	"	'		'	
"	"	'		'	
"	"	'		'	

Formations Open To Wellbore: _____

****

SUSPENSE FIL

● CORE ANALYSIS ● WATER REPRESSUR NGINEERING ● WATER ANALYSIS ODING WATER TREATMENT ● SURVEYING

OILFIELD RESEARCH LABORATORIES

- REGISTERED ENGINEERS -

700 NORTH MISSION
OKMULGEE, OKLAHOMA
PHONE: 4444

536 N. HIGHLAND
CHANUTE, KANSAS
PHONE: HE 1-2650

Chanute, Kansas ✓

September 19, 1961

30-W23

Phillips Petroleum Company
Production Department
Bartlesville, Oklahoma

Gentlemen:

Enclosed herewith are the results of permeability and porosity tests run on the Rotary core taken from the North Burbank Unit, Well No. 30-W23, Osage County, Oklahoma, and submitted to our laboratory on September 14, 1961.

This core was taken and shipped to our laboratory by a representative of the Phillips Petroleum Company.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Fred O. Stenger

Fred O. Stenger

FOS:rf

1 c. - S.I. Betzer

RECEIVED
SEP 20 1961
SHIDLER OFFICE

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Phillips Petroleum Co. Lease N.B.U. Well No. 30-W23

Location SE¼

Section 15 Twp. 27N Rge. 5E County Osage State Oklahoma

Name of Sand	Burbank
Top of Core	3130.0
Bottom of Core	3187.0
Top of Pay Sand	3138.0
Bottom of Pay Sand	3173.0
Total Feet of Permeable Sand	47.0
Total Feet of Floodable Sand	-

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 10	13.0	13.0
10 - 20	4.0	17.0
20 - 100	9.2	26.2
100 - 300	7.8	34.0
300 & above	13.0	47.0

Average Permeability Millidarcys	345.
Average Percent Porosity	20.8
Average Percent Oil Saturation	
Average Percent Water Saturation	
Average Oil Content, Bbls./A. Ft.	
Total Oil Content, Bbls./Acre	
Average Percent Oil Recovery by Laboratory Flooding Tests	
Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft.	
Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre	
Total Calculated Oil Recovery, Bbls./Acre	
Packer Setting, Feet	
Viscosity, Centipoises @	
A. P. I. Gravity, degrees @ 60 °F	
Elevation, Feet	