

## CORE ANALYSIS

ARTHUR CAIN # 1(10-55-A)

1037-1057'	10 feet of red silstone with red shale streaks
1057-1047'	siltstone brick red, red shale inclusions.....10"
	red siltstone and gray shale slightly.....9"
	crossbedded.
	red shale.....10"
	red silstone, various scattered gray green
	shale inclusions, fracture plane filled w/gypsum.19"
	red silstone with gray green shale inclusions....24"
	red silty shale, slight increase gray green.....24"
	shale inclusions
	red siltstone, vertical fractures filled.....24"
	with gypsum
1047-1057'	same as above.....24"
	same as above.....24"
	as above with streaks of silstone and red.....24"
	shale
	red siltstone.....43"
1057-1055'	red siltsone interlaminated with red and.....24"
	gray green shale, slightly reworked appearance
	red shale.....24"
	red siltstone with thin shale streaks.....24"
	red siltsone, occasional shale streaks.....24"
	red shale.....12"
1065-1076'	red siltstone.....6"
	red silty shale.....13"
	same as above.....24"

	red siltstone.....	13"
	same as above.....	13"
1075-1095'	red siltstone, shale in part.....	13"
1085-1095'	red siltstone slightly reworked, trace of.....	23"
	small gypsum inclusions	
	red siltstone, slightly reworked.....	13"
	same as above.....	24"
	red siltstone, trace of thin gypsum laminae...	24"
	same as above.....	24"
1095-1105'	gray green shale.....	4"
	red shale with gypsum partings.....	13"
	gray green silty shale.....	2"
	red siltstone.....	10"
	gray green siltstone.....	5"
	red siltstone.....	10"
	gypsum.....	1"
	red siltstone.....	13"
	same as above.....	48"
1105-1115'	red shale with gypsum partings.....	24"
	red siltstone with streaks of red shale.....	24"
	red shale with gypsum partings.....	24"
	gray green shale.....	5"
	red shale.....	19"
	maroon anhydrite and gypsum.....	24"
	(probably top of San Andres Formation)	
1115-1125'	gray anhydrite.....	14"
	red anhydrite.....	10"

	red shale.....	1'
	gray anhydrite.....	18"
	red and gray anhydrite.....	24"
	red anhydrite.....	3"
	red shale with gypsum partings.....	.9"
	red anhydrite with thin red shale laminae....	12"
	red shale, thin gypsum partings.....	18"
	gray anhydrite with thin streaks red shale....	6"
1135-1134'	dark gray anhydrite.....	24"
	as above with slight red tint.....	24"
	maroon anhydrite.....	24"
	red shale with gypsum partings, anhydrite....	24"
	streaks	
	red shale with gypsum partings.....	24"
1134-1144'	dark gray anhydrite.....	72"
	same as above with gypsum laminae.....	24"
	same as above.....	24"
1144-1154'	gray anhydrite, grading from gypsum to.....	11'
	anhydrite	
	gray dolomite with inclusion of gray anhy-	13"
	drite	
	dark gray dolomite, scattered anhydrite.....	29"
	inclusions at top grading into solid dolomite	
	at base with vertical fractures	
	dense gray dolomite or gray siltstone.....	23"
	black dolomite and anhydrite mixed, thin .....	18"
	dolomite laminae	
	black dolomite.....	16"
	dark gray shale with gypsum partings.....	10"

1164-1174'	gray shale with reddish anhydrite inclusions.....	top
	gray anhydrite.....	10"
	gray black shale with anhydrite and gypsum.....	5"
	partings	
	red siltstone (gradation contact).....	.8"
	red siltstone grading into.....	13"
	gray anhydrite and gypsum with thin shale.....	6" b.
	laminæ	
	gray anhydrite and gypsum.....	24"
1164-1174'	gray anhydrite with gypsum stringers.....	24"
	gray anhydrite with trace of very thin.....	24"
	scattered dolomite laminations	
	gradational change from anhydrite to gray.....	24"
	dense dolomite	
	dense gray dolomite, with top 4" highly.....	24"
	fossiliferous	
	same as above with apparent silt and anhydrous... .	24"
	streaks, with pin point vugular porosity in	
	lower foot	
1174-1184'	dense dolomite with anhydrite and gypsum.....	24"
	streaks, silty shale streaks near base with	
	bottom 1" showing pin point to vugular porosity	
	gray anhydrite, slightly dolomitic, with pin.....	24"
	point to vugular porosity throughout	
	gray anhydrite .....	35"
	gray dolomite.....	10"
	dark gray to black shale.....	3"
	shale with gypsum strings toward base.....	10"
	grading into	
	gray anhydrite.....	14"
1184-1195'	dark gray anhydrite with possible thin	
	GYPsum, bottom 2" very shaly.....	10"

1175-1115'	red shale with anhydrite inclusions.....	1"
	dark gray anhydrite.....	1"
	dark gray anhydrite with gypsum stringers.....	1"
	dark gray anhydrite.....	1"
1185-1115'	gray anhydrite.....	18"
	gray anhydrite with modeled gypsum inclusion.....	24"
	same as above.....	4"
1215-1223'	gray anhydrite with gypsum inclusions.....	8"
	same as above with increasing amount of gypsum....	20"
	gypsum, with anhydrite and gypsum at base.....	4"
1225-1235'	gray anhydrite.....	24"
	red anhydrite.....	6"
	red shale with gypsum inclusions.....	5"
	gray to black shale with gypsum inclusions.....	8"
	gray anhydrite slightly dolomitic with gypsum.....	7"
	stringers	
	gray anhydrite with gypsum.....	24"
	same as above.....	4"
1235-1243'	gray anhydrite.....	27"
	red shale with anhydrite stringers.....	6"
	gray anhydrite, very shaley.....	18"
	red shale with gypsum and anhydrite inclusions....	17"
	grading into	
	shale and gypsum.....	4"
	dark gray anhydrite.....	4"
1245-1252	dark gray anhydrite.....	9"

1251-1251'	dark gray anhydrite.....	8"
	grading into	
	red shale with anhydrite and gypsum porling.....	10"
	red shale with anhydrite.....	17"
	dark gray anhydrite.....	11"
1251-1252'	dark gray anhydrite.....	5"
	same as above.....	5"
	grading into	
	shaly anhydritic dolomite.....	12"
1252-1253'	dark gray dolomite grading into anhydrite.....	19"
	at the base	
	anhydrite with trace of dolomite.....	5"
	same as above.....	45"
	black shale.....	5"
	black shale, very anhydritic.....	14"
	gray anhydrite with black shale stringers.....	10"
	same as above.....	24"
1253-1253'	anhydrite with a reddish tint.....	19"
1253-1303'	gray to reddish gray anhydrite grading into .....	4' 10"
	dense anhydritic dolomite with pin point to	
	vugular porosity, no shows	
	dense dark gray dolomite.....	21"
	black shale grading into shaly dolomite and .....	41"
1303-1306'	anhydrite	
	missing	
1306-1316'	gray anhydrite.....	6'
	dark gray anhydrite.....	7"
	black shale, and anhydrite as above.....	14"
	black shale.....	3"
	red shale with anhydrite and gypsum.....	24"

1316-1317' red shale with gypsum inclusions.....10"

gray anhydrite.....10"

reddish gray shale.....30"

1316-1336' maroon black shale with gypsum stringers.....10"

red shale.....8"

red anhydrite.....22"  
b

red to maroon shale.....5"

gray anhydrite with shale inclusion & stringers..15"

gray and reddish gray anhydrite.....14"

1336-1346' gray anhydrite.....4"

gray dolomite with pin point porosity.....20"  
no shales

gray dolomite becoming more anhydritic at base....24"  
grading into

gray anhydrite.....14"

gray dolomite with good pin point to vugular.....16"  
porosity, possible oil stain getting solid dr.  
brown toward base.

1346-1346' missing

1346-1355' missing

1355-1365' buff colored siltstone (possibly shaley dolomite...6'9"  
tan dolomite with pin point to vugular  
porosity with scattered possible oil staining.....15"

dark gray anhydrite.....2"

gray dolomite with slight pin point porosity.....22"  
at top, dense at base

1365-1380' missing

1381-1382'	dark gray dense dolomite.....	10"
	gray to tan dolomitic shale.....	10"
	gray anhydritic shale, with abundant gypsum.....	10"
1382-1383'	gray to tan shale with anhydrite stringers.....	5"
1383-1401'	gray anhydrite with gypsum and shale streaks.....	5"
1400-1403'	dark gray to gray anhydrite.....	8"
1403-1413'	dark gray anhydrite.....	6"
	gray dolomite with anhydrite stringers.....	4"
1413-1423'	gray to tan dolomite, scattered porosity.....	19"
	and staining throughout	
1423-1433'	same as above.....	19"
	gray dense limestone.....	4' 6"
	gray dolomite.....	9"
	gray to black shale lined with gypsum.....	39"
	stringers	
1433-1446'	gray anhydrite.....	24"
	dark gray anhydrite.....	12"
	reddish shale to gray shale and anhydrite.....	12"
	gray anhydrite.....	10"
	tan to buff dolomite, possible oil stains, .....	38"
	pin point to vugular porosity	
1453-1454'	missing	
1454-1464'	gr. crystalline limestone, granular with good....	10'
	pin point to vugular porosity, scattered light	
	tan staining in zones of porosity	
1464-1474	gray limestone as above.....	6' 6"
	black, very shaly lime.....	2' 6"
1474-1474'	gray limestone grading into.....	6'
	gray shale with lime inclusions.....	4'