FHR-8-300 (11-78)

United States Department of the Interior
Heritage Conservation and Recreation Service

National Register of Historic Places Inventory—Nomination Form

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic Drumright Gasoline Plant No. 2

and/or common

2. Location N of Drumright

street & number R.R. #1, Box 250 N/A not for publication

city, town Drumright nnc x vicinity of congressional district No. 2

state Oklahoma code 40 county Creek code 037

3. Classification

Category	Ownership	Status	Present Use	
___ district	___ public	x occupied	___ agriculture	___ museum
___ building(s)	x private	___ unoccupied	___ commercial	___ park
x structure	___ both	___ work in progress	___ educational	___ private residence
___ site	**Public Acquisition**	**Accessible**	___ entertainment	___ religious
___ object	N/A in process	___ yes: restricted	___ government	___ scientific
	___ being considered	x yes: unrestricted	x industrial	___ transportation
		___ no	___ military	___ other:

4. Owner of Property

name Atlantic Richfield Corporation - ARCO Oil and Gas

street & number P.O. Box 521 Att: Raymond Kaklenski

city, town Tulsa ___ vicinity of state Oklahoma 74101

5. Location of Legal Description

courthouse, registry of deeds, etc. Office of County Clerk

street & number Creek County Courthouse

city, town Sapulpa state Oklahoma

6. Representation in Existing Surveys

title Cushing Historic Oil Field Survey has this property been determined elegible? ___ yes X no

date 1980 ___ federal x state ___ county ___ local

depository for survey records Oklahoma Historical Society - State Historic Preservation Office

city, town Oklahoma City state Oklahoma

7. Description

Condition		Check one	Check one
_x_ excellent	___ deteriorated	_x_ unaltered	_x_ original site
___ good	___ ruins	___ altered	___ moved date _____
___ fair	___ unexposed		

Describe the present and original (if known) physical appearance

The Drumright Gasoline Plant No. 2 opened operations on August 2, 1917. Original structures that still remain from this early industrial complex include the office, engine room, auxiliary building, boiler house, two water storage towers, and three fuel storage tanks (see attached sketch map for placement of original structures). The office, engine room, auxiliary building, and boiler house are all one story buildings covered with corrugated tin painted silver. All four have gabled roofs and sit on cement foundations. One of the striking features of all four buildings is the amount of ventilation provided because of the extreme heat and humidity produced by the various equipment. Each building contains ample roof vents, flexivent windows, and either sliding or double doors.

The overall dimensions of the office are 24' x 118'. It houses office space on the west end for various plant personnel including plant manager and field foreman. The testing lab, tool and machine shop, and fire fighting equipment are also located in the office building. Additions to the original office building were completed in 1952. They included enlarged office space on the northwest corner for plant personnel and restroom facilities on the east end of the building.

The engine room, located directly east of the office building, is 60' x 140'. A band of sixteen windows and five sliding doors are positioned in both east and west sides of the building. There are two double-hung windows and sliding doors on both north and south ends of the building. The building houses two of the three engines that generate electrical power for the complex. Both of these engines were installed in 1952 and include a Cooper GN8GB, 8-cylinder and a Cooper JS5, 5-cylinder. The auxiliary building contains the only remaining original engine still in operation, a 4-cylinder vertical design Foos Gas model (165 h.p.) installed in 1917. The dimensions of the auxiliary building are 60' x 80'. Seven windows and single doors in east and west ends, two windows in north and south ends, five roof air vents, and three large exhaust mufflers supply abundant ventilation. The auxiliary building is positioned approximately 15' south of the engine building. The boiler house is located approximately 15' south of the auxiliary building. There are five windows and three double doors on both east and west facades of the building, and two windows on north and south elevations.

The two original water storage towers are located northeast of the engine building. Each is constructed of riveted steel painted silver. Both have a capacity of 1600 barrels. One served as the "house water tank" and the other as the "engine water tank." The three original gasoline storage tanks are located in the northeast portion of the plant grounds. They are constructed of riveted steel painted silver and measure 10' x 40' each. Sitting on their original foundations in a north-south row, the one on the north end has a capacity of 4,500 gallons, the middle one, 8,000 gallons, and the one on the south, 9,000 gallons, All three are still used in handling present day products.

continued

FHR-8-300A
(11/78)
UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

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Description continued:

Buildings added in the 1920s and 1950s include the welding shop (a 30' x 40' building located west of the boiler house), control building (a 20' x 40' structure east of the engine room), treater building (a 60' x 140' structure east of the control room), and the meter and pump buildings located southeast of the treater building (see attached sketch map for placement). All of these later additions are covered with corrugated tin painted silver to blend with the original buildings.

The original gathering system of the Drumright Gasoline Plant No. 2 consisted of approximately 10 miles of pipeline. Presently, the gathering system exceeds 400 miles of pipe. When it began operations, casinghead gasoline was the main product. From 1917 to 1952, all incoming gas from the producing fields was extracted by the compression/refrigeration method (see attached diagram illustrating the system). Propane was considered undesirable during the early years of the plant's operation and was usually burned off. Following World War II, however, propane became the main product because of its use as a home heating fuel.

In 1952, the plant processing system underwent several changes. The compression/refrigeration method of extracting gas was replaced with the low pressure absorption method. A depropanizer, an automated propane loading dock, and two new generators were installed. The plant currently extracts all butane and propane from gas production in the Cushing field. After extraction, the gas is returned to producers for use as engine fuel in the field. The propane and butane are sold via tank truck, railcars, and pipeline.

The plant presently processes approximately 6,000,000 cubic feet of gas per day. The complex is tied in to 1,100 active wells in the Cushing field. Propane recovery totals approximately 15,000 gallons a day, and natural gas and butane recovery is about 25,000 gallons daily.

8. Significance

Period	Areas of Significance—Check and justify below				
___ prehistoric	___ archeology-prehistoric	___ community planning	___ landscape architecture	___ religion	
___ 1400–1499	___ archeology-historic	___ conservation	___ law	___ science	
___ 1500–1599	___ agriculture	___ economics	___ literature	___ sculpture	
___ 1600–1699	___ architecture	___ education	___ military	___ social/ humanitarian	
___ 1700–1799	___ art	___ engineering	___ music	___ theater	
___ 1800–1899	___ commerce	___ exploration/settlement	___ philosophy	___ transportation	
_x_ 1900–	___ communications	_x_ industry	___ politics/government	___ other (specify)	
		___ invention			

Specific dates 1917-Present **Builder/Architect** Harry Sinclair

Statement of Significance (in one paragraph)

The Drumright Gasoline Plant No. 2 is significant for the following reasons: (1) it is the oldest natural gas processing plant in operation in the United States, (2) it represents the founding of the Sinclair Oil and Gas Company, (3) it currently processes all the gasoline in the Cushing field, and (4) it still uses several pieces of original equipment installed when the plant was built in 1917.

The Drumright Gasoline Plant No. 2 began operations on August 2, 1917. During the peak period of the Cushing field, there were approximately 250 plants of this type producing casinghead gasoline in the area. All of these plants have ceased operation, except the Drumright Gasoline Plant No. 2.

This industrial structure was built and operated by Harry Sinclair of Sinclair Oil and Gas, one of the prominent companies to emerge from the Cushing field. It remained as a part of the Sinclair Company for over 52 years. Sinclair designated the Drumright plant as No. 2 because his No. 1 plant was located at Cleveland, Oklahoma which terminated operations in the mid-1950s. Using approximately 400 miles of pipeline, the Drumright Gasoline Plant No. 2 currently processes all the gasoline produced in the roughly 300 square mile area of the Cushing field.

Original equipment still in use at the plant includes a four cylinder vertical design Foos Gas Engine (165 h.p.), two 1600 barrel water storage towers, three gasoline storage tanks, and two Dean Brothers reciprocating pumps. The Foos Engine, installed in 1917, stands along two modern units to generate the plant's electricity. It formerly powered a 2-ply 22" x 85' leather drivebelt made from approximately 1000 cowhides.

The Drumright Gasoline Plant No. 2 provides a vital educational resource concerning early industrial complexes built during the oil boom periods including design of buildings, use of construction materials, arrangement of structures, and positioning of the plant in relation to its gathering system. Furthermore, the original structure and equipment furnish educational information concerning the early processes of extracting gasoline including both the compression/refrigeration and absorbant methods.

9. Major Bibliographical References (continued)

Interview with Henry A. Witcher, former Region Manager of the Midcontinent Gas and Gas Products Division of Sinclair Oil and Gas Company, April, 1980.

Interview with Jim Parker, Office Manager, Drumright Gasoline Plant No. 2, Atlantic Richfield Corporation, May, 1980.

10. Geographical Data

UTM NOT VERIFIED

Acreage of nominated property 16.72 acres

Quadrangle name Oilton, OK **Quadrangle scale** 7.5 min.

UMT References

	Zone	Easting	Northing
A	14	717960	3987370
B	14	717960	3987570
C	14	717810	3987360
D	14	717810	3987550
E			
F			
G			
H			

Verbal boundary description and justification

Beginning at a point 1189' north of the southwest corner of the Northwest ¼ of the Southwest ¼ of Section 28, T18N R7E, along Oklahoma Highway No. 99 that forms west boundary of the section, proceed east 300', then north 100', then east 685' which (cont.)

List all states and counties for properties overlapping state or county boundaries

state	N/A	code	county		code
state		code	county		code

11. Form Prepared By

name/title	Robert Sweet Directed by Dr. George O. Carney		
organization	Cushing Historic Oil Field Survey	date	July, 1980
street & number	Oklahoma State University	telephone	405-624-6248
city or town	Stillwater	state	Oklahoma

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

___ national ___ state ___ local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the Heritage Conservation and Recreation Service.

State Historic Preservation Officer signature

title SHPO Cemetery 1-18-82 date ~~11/31/80~~

For HCRS use only

I hereby certify that this property is included in the National Register

Bill Graves for Keeper of the National Register date 7/27/82

Attest: date

Chief of Registration

GPO 938 835

Form No. 10-300a
(Rev. 10-74)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

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Natural, or casinghead gasoline, was produced from the natural gas that accompanied the flow of crude oil from a well. The first casinghead gasoline processing plant built in the Mid-Continent Field of Oklahoma-Texas-Kansas was at Keifer, Oklahoma. Constructed in 1909 following the discovery of the first major field in Oklahoma (Glenn Pool) ten miles south of Tulsa, the Keifer plant was operational until ca. 1950 and was later demolished in the mid - 1950's.

The next major field to be opened in the Mid-Continent Field was near Cushing, Oklahoma from which it derived its name. Because of the large amounts of casinghead gasoline found in the oil wells of the Cushing Field, approximately 250 processing plants were established in the area during the peak production period of 1915 through 1917. Many of the 250 plants were small, independently owned operations, however, Harry Ford Sinclair constructed three major casinghead gasoline processing plants during the peak production years. (Sinclair Plant No. 1 at Cleveland, Sinclair Plant No. 2 at Drumright, and Sinclair Plant No. 3 at Shamrock).

Sinclair began his petroleum career in Oklahoma in 1906 with the opening of the Glenn Pool Field. By selling wooden derricks, he accumulated sufficient money to purchase several small leases. By the time the Cushing Field opened in 1912, Sinclair owned eight drilling rigs and headed sixty-two small petroleum companies. During the next four years, he became the largest independent oil man in the Kansas, Oklahoma, and Texas region. On May 1, 1916 Sinclair established the Sinclair Oil and Refining Corporation and joined the corporate ranks along with Standard Oil, Gulf, and Getty. During the Cushing Field's peak production era, Sinclair expanded his marketing area westward to Denver, Colorado and eastward to Albany, New York. He was the first producer to construct an 8-inch pipeline from the Cushing Field to refineries in Kansas City and Chicago which enhanced his outlets for competition on a national level.

Sinclair's natural gas processing operations in the Cushing Field continued to be a significant part of the Sinclair marketing system until the mid-1940's when the No. 1 plant at Cleveland closed because of declining gas production in the northern part of the Cushing Field. Plant No. 1 was sold and eventually demolished in the late 1940's. The No. 3 Sinclair Gas Plant at Shamrock was absorbed by the No. 2 Sinclair Plant at Drumright in the 1950's and currently serves as a satellite station for the Drumright operation.

Therefore, the Drumright Gas Plant No. 2, originally built and operated by the Sinclair Corporation, is the only casinghead gas processing plant still standing and operational of the 250 plants that once existed in the Cushing Field.

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

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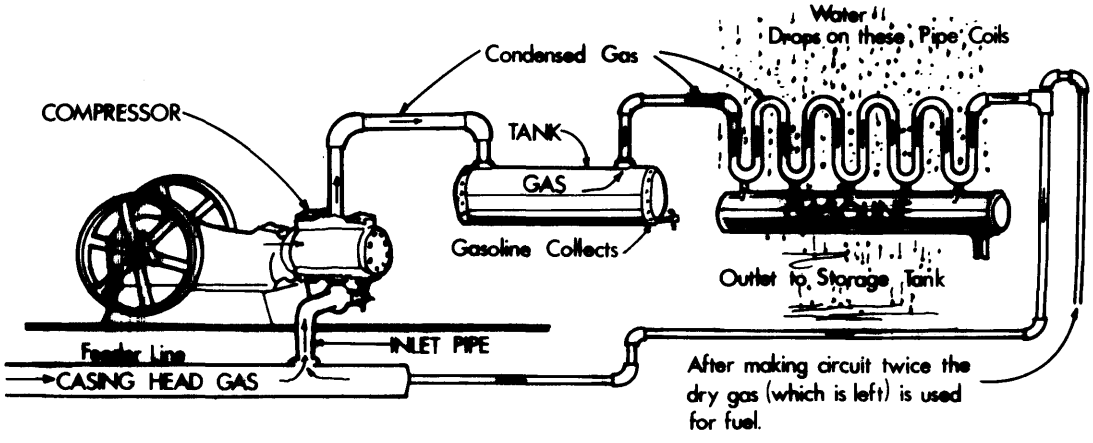
References continued:

Interview with Maurice Salisbury, Acting Field Foreman, Drumright Gasoline Plant No. 2, Atlantic Richfield Corporation, May, 1980.

Verbal Boundary Description continued:

forms the southern boundary of the plant. Turn north at southeast corner of nominated property and proceed 710', then turn west and proceed 985' back to along Oklahoma Highway No. 99, then south 810' to the point of beginning.

GENERAL DIAGRAM SHOWING PLAN OF
CASINGHEAD GASOLINE PLANT OPERATING
BY COMPRESSION AND REFRIGERATION



Source: Bowles, Charles E., The Petroleum Industry. Kansas City, Missouri: Schooley Stationery and Printing Company, 1921.

Arco–Drumright Gasoline Plant