

OIL & GAS DEVELOPMENT COMPANY LIMITED



TENDER ENQUIRY NO. PROC-SERVICES/CB/RMD-5008/2021

**HIRING OF SERVICES FOR IDENTIFICATION OF GAS OOZING
IN X GAS CONDENSATE FIELD OF OGDCL**

Note:

Bid bond of **USD 1,000/- (US Dollar One Thousand Only)** to be submitted with the technical bid.

The master set of tender documents (services) uploaded on OGDCL website (www.ogdcl.com) is the integral part of this TOR.

IDENTIFICATION OF GAS OOZING IN X GAS CONDENSATE FIELD OF OGDCL

Introduction

The X Field covers an area of 128.9 Km². It is located in Sanghar district in Sindh Province of Pakistan and is operated by OGDCL which has 100% ownership interest in this field. The field was discovered in 1988 by exploratory well “X-1”. Since the discovery of hydrocarbon prospect across Sands of Lower Goru formation, eleven more wells have been drilled in this field. After discovery from X-1 well, X-2 and X-3 were drilled in 1988-89 and were successfully completed across Middle and Basal Sands. X South-1 and X North-1 were drilled in 1990 and 1991 to appraise the structure. However, both wells turned out to be dry and were plugged and abandoned. X-4, X-5 and X-6 were drilled in 1992, 1993 and 1994 respectively whereas X-7 and X-8 were drilled in 1997. Later, X-9 was drilled in 2003 and was completed with dual strings across Middle Sands. Recent most well in field is X-10 which was drilled in 2012-13 however, well is currently suspended.

X-1:

X-1 was an exploratory well spudded on 02-03-1988. Well was brought on production in February 1989 and remained on production till October 1989. During this duration, well produced with an average GOR of 1275 SCF/STB. Later well was shut in till July 1997 and was re-opened for production in August 1997. Well remained on production till December 1998 and has been shut in since.

X-2:

X-2 was an appraisal well spudded on 27-12-1988. During initial testing, both Zone-4 (Middle Sands) and Zone-5 (Basal Sands) proved to be hydrocarbon bearing. During DST across Zone 4-B (interval 2385-2387.5 m). Well was completed as a dual producer with Zone-4 completed with short string and Zone-5 completed with long string. Well was brought on production from both strings in June 2004. Short string produced from June 2004 to August 2005 and has been shut in since. Long string was brought on production in August. Long string remained on production from Zone-5 (August 2004 to December 2014).

X-3:

X-3 was an appraisal well spudded on 20-06-1989. During initial testing, both Zone-4 and Zone-5 proved to be hydrocarbon bearing. Well was completed as a dual producer with Zone-4 completed with short string and Zone-5 completed with long string. Long string was brought on production in November 1989 and remained on production till September 1996. Well was shut in from October 1996 to June 1998. After June 1998, well produced intermittently for few months in 1998 and 2008. Well produced for more than a year from July 2010 to November 2011 and has been shut in since July 2013. Currently the well is on production from Short string.

X-4:

X-4 was a development well spudded on 27-03-1992, Zone 4-B was perforated across interval 2389-2395.5 meters and production from this zone was carried out through annulus. Production through tubing (Zone-5) started in October 1996 and remained on production till August 1997.

Production from Zone 4-B was started in September 2004 through annulus and remained on production till December 2009.

X-5:

X-5 was spudded on 05-10-1993 and reached TD of 2740 m across Basal Sands on 20-11-1993. Well was not tested and based on logs evaluation, it was declared as dry. Well was therefore, converted into a water disposal well.

X-6:

X-6 was a development well spudded on 02-12-1994. The well was completed and brought on production in March 1995. Well remained on production till October 1996. Well was later brought on production in May 2000 and produced for 6 months before it was shut in November 2000.

X-7:

X-7 was a development well spudded on 14-03-1997 and reached TD of 2900 m across Massive Sands on 21-05-1997. Well didn't produce any hydrocarbons and was plugged and abandoned.

X-8:

X-8 was a development well spudded on 17-06-1997. Well was completed as a dual producer across Zone 4-C and Zone 5-B with short string and long string respectively. Short string was brought on production in June 2004 and remained on production till December 2004. Long string (Zone 5-B) was brought on production in August 2004 and remained on production till October 2008. Well was later converted into gas injector through short string whereas long string remained shut in.

X-9:

X-9 was a development well spudded on 24-08-2003. Well was completed as a dual producer across Zone 4-B and Zone 4-C with short string and long string respectively. Short string (Zone 4-B) was brought on production in December 2004 remained on production till June 2019. Long string (Zone 4-C) was brought on production in August 2005 and remained on production till June 2019.

X-10:

X-10 was a development well spudded on 25-12-2012 and reached TD in April 2013. Well was tested with MDT where shallower interval proved to be tight whereas deeper intervals proved to be water bearing. Well was later suspended for evaluation of shale gas/tight gas prospect.

X South-1:

X South-1 was spudded on 09-07-1990 and was drilled down to a total depth of 2956 m. Well was not tested and was plugged and abandoned based on petro physical evaluation.

X North-1:

X North-1 was spudded on 01-07-1991 and was drilled down to a total depth of 2850 m. Well was plugged and abandoned.

Objective:

OGDCL requires the services for Identification of gas oozing in the X Gas Condensate Field. The oozing was observed at different places in the field area. The purpose of the service

required is to identify the source of the leaked gas which has similar composition as the reservoir gas. Company has investigated the problem but was unable to ascertain the exact well or location which might be the source of the leaked gas from the reservoir to the surface.

Scope of Work:

The consultant should clearly identify the channeled gas in the investigation of the affected area. The report submitted should include and mark the concentration of gas present near the surface area and identify the possible path of the channeled gas from the wells to the surface. The report should give all the possible solutions for preventing the gas oozing in the affected area. Further to this, the consultant will need to clearly mention the method which they will use to investigate the leakage source and pinpoint the well / location. In addition to this they will need to provide a similar case history which they handled in the past successfully.

Gas Oozing History:

Gas oozing was first reported in May 2019, in X field in an abandoned tube well followed by gas oozing in cultivated land near X-4 well. The gas was flaring inside the tube well room and outside water drain in significant quantity, but was confined. This tube well location is at Latitude: 25-51-3.9807 and Longitude: 68-56-37.1434 at a height of 19.834 AMSL. The distance of tube well from the nearby wells X-4 and X-9 are located 0.80 Km and 0.48 Km respectively.

OGDCL secured the tube well and killed suspected wells (for oozing) as migratory action based on the available information, gas oozing could not stop. Later, during the drilling of Lower Goru (Upper Shale) in X Deep-1 well, oozing problem again encountered near the rig area. OGDCL suspended the drilling operations immediately.

The affected areas in the field and around the wells where gas bubbles were observed are X Deep-1 (Rig Hi Long 17) cellar and rig foundation, X Deep-1 (Rig Hi Long 17) in front and back side of FC rooms (75 m from X Deep-1 cellar), Near well X-8 (300 m from X Deep-1), Mud Pit of Well X-8 (400 m from X Deep-1), Cellar of well X-8 (400 m from X Deep-1), Cellar of well X-6 (1.6 Km from X Deep-1)

Distances of X wells from under drilling (currently suspended) X Deep-1 well are marked on Google earth imagery below.



Available Data:

- Lithological and well logs.
- Composition data of processed samples.
- Maps (location and structural cross section).
- Seismic data.
- Well Completions
- Production History
- Photographs and other relevant surface observations.

Completion Period:

The time for submission of the final report is 8 weeks which starts from the date of complete handing over of the data and its acceptance by the consultant.

There will be a briefing after every two weeks about the progress of the work done by the consultant and before the final delivery, the consultant will submit the draft final report for review and necessary changes if any.

Deliverables

- The consultant shall submit an executive summary and a report of the study. This report/summary will also be provided in hard copy and digital formats (.docx & .pdf)
- The report must identify the source of the channeled gas.
- The report must identify the concentration of gas present near the surface area of the affected zones.
- The report should give us all the possible solutions for preventing the gas oozing in the affected area.
- Report must include the method used for investigation.
- Report must include a similar case history which they handled successfully in the past.

Terms & Conditions

2.1. General:

- 8.1.1. The study will be carried out by the same office invited to bid for the study.
- 8.1.2. The study will be conducted by the consultant with active participation and involvement of technical team of OGDCL.
- 8.1.3. After signing of the contract, Consultant/ Firm will carry out data review in 1 week's time. In this review, consultant will check whether the available data is enough to carry out the study. The review should acquire all the objectives mentioned in TORs.
- 8.1.4. The personnel carrying out the study should be dedicated fully to this study and will be available throughout the study tenure.
- 8.1.5. OGDCL may arrange a pre-bid meeting on request to explain the present status of the field and objective of the study. The consultants will participate in the meeting at their own cost.
- 8.1.6. All technical data for the study will be available to the consultant free of charge. Such material will be the property of OGDCL, and the Consultant will treat all data and information supplied by OGDCL and those acquired by consultant during the implementation of the study with utmost confidentiality.
- 8.1.7. OGDCL reserves the right to discontinue any study/ any task/ any service related to above scope of work at any stage without assigning any reason. OGDCL reserves the right to reject the services of any professional provided by the consultant/ firm at any time/ any stage and hence it will be the responsibility of the consulting firm to provide the replacement without any delay accordingly.
- 8.1.8. After completion of the study, all the data shared for the purpose of the study will be returned to OGDCL.

2.2. Submission of Proposals

- 8.2.1. Technical & Financial proposals should be given separately, in two sealed envelopes, clearly marked "**Identification of Gas Oozing in X Gas Condensate Field of OGDCL**".
- 8.2.2. A soft copy (PDF) of the technical proposal must be submitted along with the hard copy.
- 8.2.3. The technical proposal must contain a brief history of consulting firm along with the information required. OGDCL encourages the bidders to submit concise bids covering the required information.
- 8.2.4. Consultant will provide the study cost as stipulated in the table below. The study will be single phase study. The Payment will be made after the final delivery and acceptance of the study report against verified invoice.

Rate format

Description	Total Cost
Total LUMP SUM in USD (Including all applicable taxes duties and Levies etc. except Provincial Sales Tax/ Islamabad Capital Territory Tax on Services in Pakistan.)	

2.3. Evaluation Criteria

8.3.1. The Technical evaluation will be based on the criteria below.

Sr. No.	Category	Points
1	Firm Experience	50
2	Professionals' Qualification & Experience	50
	Total	100

8.3.2. Criteria for selection of the consultant will be based on Clause-3B of PPRA Rules (Quality & Cost Based Selection).

8.3.3. 70% weight age will be given for technical evaluation and 30% for financial evaluation. The lowest bidder will attain maximum marks in financial evaluation and others would be ranked on the sliding scale. The points obtained in technical and financial evaluation will be combined and the bidder attaining maximum points will be awarded the contract.

8.3.4. The consultant shall provide at its own expense suitably qualified personnel to act as Project Coordinator to ensure efficient performance of the study and to achieve the objectives.

8.3.5. OGDCL urges the bidder to stay to the point in their bids and avoid submitting unnecessary details.

Technical Evaluation Criteria		
Sr. No.	Category	Points
		100.00
1	Firm Experience	50.00
1.1	Total Experience of the firm working with Oil & Gas industry.	25.00
	9 or more Years	25.00
	5 to 8 Years	15.00
	1 to 4 Years	5.00
	Less than 1 Year	Disqualified
a. Consultant should clearly mention its total relevant experience with proof/completion certificate. Experience less than 1 year will be disqualified. b. Personnel Experience will not be taken as substitute of Firm Experience		
1.2	Experience of the firm in last five (05) years in similar projects.	25.00
	6 or more Projects	25.00
	4 to 5 Projects	15.00
	2 to 3 Projects	10.00
	Less than 2 Project	Disqualified
a. Company Name, Name of the project, Country, Study Year, Brief description of Problem Statement/ Scope of Work (10-15 Lines max) should be clearly mentioned in a table to support the claim. Less than 1 project will result in disqualification. b. Only those Projects/ Studies will be considered for evaluation for which information required in Note "a" would be provided. c. Consultant should clearly mention only the relevant studies/ Projects.		
2	Professionals' Qualification & Experience	50.00
For evaluation purposes, only Team leads' qualification & experience will be rated		
BS means Bachelor of Science equivalent to 16 years education while MS means Master of Science equivalent to 18 years education. (engineering and geo sciences)		
	Project Manager	50.00
	MS or higher and 11 Years or more experience.	50.00
	MS or higher and 6 - 10 Years experience.	40.00
	MS or higher and 1 - 5 Years experience.	30.00

	BS and 11 Years or more experience.	40.00
	BS and 6 - 10 Years experience.	30.00
	BS and 1 - 5 Years experience.	20.00
	Less than 1 Year of experience regardless of Qualification.	Disqualified
Only relevant experience will be considered for evaluation purpose instead of Total Experience. Therefore, Consultant should clearly mention the number of years of relevant experience.		

Note : Disqualified in any category will result in overall disqualification.

minimum of 70% combined overall marks will be required for qualifying.