

**2D SEISMIC INTERPRETATION OF
REFLECTION DATA OF LINE 986-
BTM-13**



BY

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2009-2011

ACKNOWLEDGEMENT

Starting With the name of Almighty **ALLAH**, Who knows every that one's can not imagine, Who bless us with the last Prophet **HAZRAT MUHAMMAD (S.A.W)** which is a complete and perfect role model for all mankind.

I feel pleasure and honor to introduce my supervisor **Lecturer M. Jahangir Khan** who is some more than teacher. Teachers are special but this person is some above than a teacher. I become silent, eyes fills with tears, and find no words to express my heartily emotions about him. To me only some written words can not explain his personality.

I am thankful to my senior **Sir Prof. Dr. Shameem Ahmad Siddique (HOD)**, (who supported me during my thesis work).

I also wish to acknowledge with thanks the assistance and valuable knowledge received from all the teachers of the department specially **Sir Zahid Ilyas and Madam Shaista Iftikhar** throughout my stay in university.

I want to introduce my hearty and senior friends **Nasir Khan (Geophysicist), M.Safdar (Geophysicist), Danish Ali (Geophysicist), Sayyed Irfan-ullah Shah (Geophysicist), Maaz Shaukat & Maqsood khan (Geologists)**, who supported me through out of my M.Sc (Geophysics) course and in theises work, and who are will be continuous source of inspiration and pleasure for me forever.

I want to introduce my university friends, **M. Irshad khan, Obaid-ur-Rehman, M. Irfan-ullah Khan, Salman Ali Hunzai, Sammi-Ullah khan** and many others who are the gift of God for me.

I also wish to acknowledge with thanks the assistance and valuable knowledge received from **Sir M. Iqbal khan (PPL)** and **Sir M.Naveed Ahmad (ENI)** during my theises.

In the last I Thankful to my Respected **Parents**, My lovely **Brothers** and my respected **Sisters** who stair all that I need and never feel any symptom of worry, always try to make me as perfect as they want with their affections, endless prayers, good wishes and inspirations that always remained me to achieve the what I need and what I want ideal of life.

ABSTRACT

Seismic line 986-BTM-13 was given me by the department of Earth & Environmental Science; for interpretation. The seismic reflection data in study area of Biterisum was acquired by Oil & Gas development Corporation Limited. The given seismic line covers reflection data from shot points 110-280. The given seismic line is a dip line which runs in area as NW-SE direction.

Root mean square velocity, Dix interval velocity, Dix average velocity data is initially conducted and I did detailed velocity analysis by interpolating velocities data at all time domain points and completed all velocity windows for 5 seconds time of seismic activity at this line. The prominent reflection patterns define three reflectors with four faults are marked on the seismic section. Basement rocks reflector is absent due to low quality of data resolution.

Basic Seismic Maps includes Time section and Depth section of seismic line BTM-13. Seismic time section is prepared by reading Two Way Time (TWT) of each reflector at every shot point. Root mean square velocity data and half of TWT define depths of each reflector. A plot of depth verses shot points results the depth section of seismic line BTM-13. Both time- and depth-section represent similar patterns of horizons and faults. Then, I work out petrophysical parameters i.e. density of rocks, poisson's ratio, bulks modulus, shear modulus etc.

All the quantitative analysis provides sufficient help in constructing geological interpretation of the area. But limitations are there in interpretation because of non-access of various well logs and utilization of high resolution seismic softwares.

Jamal Shah

17 oct 2011

CONTENTS

CHAPTER NO 1 INTRODUCTION OF STUDY AREA

| Description | Page #No |
|--|-----------------|
| 1.1 INTRODUCTION OF STUDY AREA | 01 |
| 1.2 OBJECTIVES OF STUDY | 02 |
| 1.3 IMPORTANT INFORMATION'S ABOUT THE STUDY AREA | 02 |
| 1.3.1 PREVIOUS WORK | 02 |
| 1.3.2 TOPOGRAPHY | 03 |
| 1.3.3 LOCATION | 03 |
| 1.3.4 BASE MAP | 04 |
| 1.3.4.1 BASEMAP OF THE STUDY AREA | 04 |
| 1.3.5 SEISMIC SECTION | 05 |
| 1.3.5.1 SEISMIC SECTION OF THE STUDY AREA | 05 |
| 1.4 GEOPHYSICAL EXPLORATION METHODOLOGY | 06 |
| 1.4.1 WHAT IS EXPLORATION? | 06 |
| 1.4.2 EXPLORATION GEOPHYSICS | 06 |
| 1.4.3 GEOPHYSICAL EXPLORATION METHODS STEPS | 06 |
| 1.5 GENERAL HEADER INFORMATION OF THE SEISMIC SECTION LINE | 08 |
| 1.5.1 INTRODUCTION OF SEISMIC SECTION | 08 |
| 1.5.2 RECORDING DATA ACQUISITION (SURVEY PARAMETERS) | 08 |
| 1.5.3 SOURCE PARAMETERS | 08 |
| 1.5.4 INSTRUMENTS PARAMETERS | 08 |
| 1.5.5 CABLE | 09 |
| 1.5.6 PROCESSING SEQUENCE | 09 |
| 1.5.7 SPREAD DIAGRAM | 10 |
| 1.5.8 SCALES | 10 |
| 1.5.8 DISPLAY PARAMETERS | 10 |

CHAPTER NO 2
GENERAL GEOLOGY AND TECTONICS OF THE AREA

| Description | Page #No |
|--|-----------------|
| 2.1 INTRODUCTION | 11 |
| 2.2 REGIONAL GEOLOGICAL SETTINGS | 11 |
| 2.3 TECTONIC FRAM WORK OF PAKISTAN | 12 |
| 2.4 PETROLEUM GEOLOGY OF PAKISTAN (SEDIMENTARY BASINS OF PAKISTAN) | 14 |
| 2.4.1 WHAT IS A SEDIMENTARY BASIN | 14 |
| 2.4.2 BALUCHISTAN BASIN | 14 |
| 2.4.3 PASHIN BASIN | 14 |
| 2.4.4 INDUS BASIN | 14 |
| 2.4.4.1 UPPER INDUS BASIN | 15 |
| 2.4.4.2 LOWER INDUS BASIN | 15 |
| 2.4.5 SOUTHERN INDUS BASIN | 15 |
| 2.4.5.1 BOUNDARIES OF SOUTHERN INDUS BASIN | 16 |
| 2.4.5.2 THAR PLATFORM | 17 |
| 2.4.5.3 KARACHI TROUGH: | 17 |
| 2.4.5.4 KIRTHAR FOREDEEP | 17 |
| 2.4.5.5 KIRTHAR FOLD BELT | 17 |
| 2.4.5.6 OFFSHORE INDUS | 18 |
| 2.5 GENERAL GEOLOGY OF THE STUDY AREA | 18 |
| 2.6 TECTONIC FRAMEWORK OF THE STUDY AREA | 19 |
| 2.7 STRUCTURAL HISTORY OF THE SUTDY AREA | 19 |
| 2.8 STRATIGRAPHY OF THE LOWER INDUS BASIN | 19 |
| 2.8.1 MESOZOIC ROCKS | 20 |
| 2.8.2 TRIASSIC ROCKS | 20 |
| 2.8.2.1 WULGAI FORMATION | 20 |
| 2.8.3 JURASSIC ROCKS | 21 |
| 2.8.3.1 SHIRINAB FORMATION | 21 |

| | |
|---|----|
| 2.8.3.2 CHILTAN LIMESTONE | 22 |
| 2.8.3.2.1 MAZAR DRIK FORMATION | 22 |
| 2.8.4 CRETACEOUS ROCKS | 23 |
| 2.8.4.1 SEMBAR FORMATION | 23 |
| 2.8.4.2 GORU FORMATION | 23 |
| 2.8.4.3 PARH LIMESTONE | 24 |
| 2.8.5 PALEOCENE | 24 |
| 2.8.5.1 KHADRO FORMATION | 24 |
| 2.8.5.2 BARA FORMATION | 25 |
| 2.8.5.3 LAKRA FORMATION | 25 |
| 2.8.6 EOCENE | 26 |
| 2.8.6.1 LAKHI FORMATION | 26 |
| 2.9 HYDROCARBON POTENTIAL OF THE AREA | 27 |
| 2.9.1 SOURCE ROCKS | 27 |
| 2.9.2 RESERVOIR ROCKS | 28 |
| 2.9.3 CAP ROCKS | 28 |
| 2.10 HYDROCARBONS FIELD AND COAL FIELDS IN THE AREA | 29 |
| 2.11 FUTURE PROSPECTS | 29 |

CHAPTER NO 3 SEISMIC METHODS

| Description | Page #No |
|---|----------|
| 3.1 WHAT IS SEISMIC? | 30 |
| 3.2 SEISMOLOGY | 30 |
| 3.3 SEISMIC METHODS | 30 |
| 3.3.1 EXPLANATION | 31 |
| 3.4 ELASTIC PROPERTIES OF SOLID MATERIALS | 31 |
| 3.4.1 DENSITY | 32 |

| | |
|---|----|
| 3.4.2 HOOKE'S LAW | 32 |
| 3.4.3 ELASTIC PROPERTY | 32 |
| 3.4.4 STRESS | 32 |
| 3.4.4.1 NORMAL STRESS | 33 |
| 3.4.4.2 LONGITUDINAL STRESS | 33 |
| 3.4.4.3 VOLUME STRESS (OR) BULK STRESS | 33 |
| 3.4.4.4 SHEARING STRESS | 33 |
| 3.4.5 STRAIN | 34 |
| 3.4.5.1 LONGITUDINAL STRAIN | 34 |
| 3.4.5.2 VOLUME STRAIN | 35 |
| 3.4.5.3 SHEARING STRAIN (μ) | 35 |
| 3.4.6 THE YOUNG MODULUS (E) | 35 |
| 3.4.7 BULK ELASTIC PROPERTIES (K) | 36 |
| 3.4.8 POISSONS RATIO (Σ) | 36 |
| 3.5 SEISMIC WAVES | 37 |
| 3.5.1 TYPES OF WAVES | 38 |
| 3.5.1.1 BODY WAVES | 38 |
| 3.5.1.1.1 P WAVES | 38 |
| 3.5.1.1.2 S WAVES | 39 |
| 3.5.1.2 SURFACE WAVES | 39 |
| 3.5.1.2.1 LOVE WAVES | 39 |
| 3.5.1.2.2 RAYLEIGH WAVES | 40 |
| 3.6 FUNDAMENTALS OF ELASTIC WAVES PROPAGATION | 40 |
| 3.6.1 WAVEFRONTS | 40 |
| 3.6.2 RAY PATH | 40 |
| 3.6.3 REFLECTION | 41 |
| 3.6.3.1 LAW OF REFLECTION | 41 |
| 3.6.4 REFRACTION | 41 |
| 3.6.4.1 SNELLS LAW OF REFRACTION | 41 |

| | |
|---|----|
| 3.6.5 HUYGENS' PRINCIPLE | 42 |
| 3.6.6 DIFFRACTION | 43 |
| 3.6.7 FERMAT'S PRINCIPLE | 43 |
| 3.7 SEISMIC REFLECTION METHOD | 44 |
| 3.8 SEISMIC REFRACTION METHOD | 45 |
| 3.9 ADVANTAGES AND DISADVANTAGES OF THE REFRACTION AND REFLECTION METHODS | 47 |
| 3.9.1 REFRACTION METHODS | 47 |
| 3.9.1.1 ADVANTAGE | 47 |
| 3.9.1.2 DISADVANTAGE | 47 |
| 3.9.2 REFLECTION METHODS | 48 |
| 3.9.2.1 ADVANTAGE | 48 |
| 3.9.2.2 DISADVANTAGE | 48 |

CHAPTER NO 4 SEISMIC DATA ACQUISITION

| Description | Page #No |
|---|----------|
| 4.1 INTRODUCTION | 49 |
| 4.2 PERMITTING | 49 |
| 4.3 ACQUISITION REQUIREMENTS | 49 |
| 4.3.1 SURVEYING/ NAVIGATION SYSTEM | 49 |
| 4.3.2 ENERGY SOURCES | 50 |
| 4.3.2.1 ENERGY SOURCES ON LAND | 50 |
| 4.3.2.1.1 EXPLOSIVE SOURCES | 50 |
| 4.3.2.1.2 NON EXPLOSIVE SOURCE | 51 |
| 4.3.2.1.3 LAND ACQUISITION | 52 |
| 4.3.2.2 MARINE SEISMIC SOURCES: (AIRGUN, WATERGUN, MARINE VIBRATOR, ETC.) | 52 |
| 4.3.2.2.1 THE AIRGUN | 52 |
| 4.3.2.2.2 WATER GUNS | 53 |

| | |
|--|----|
| 4.3.2.2.3 MARINE VIBRATORS | 53 |
| 4.3.2.2.4 MARINE ACQUISITION | 53 |
| 4.3.2.3 SKETCH SHOWING NATURAL & MAN MADE EVENTS | 54 |
| 4.4 RECEIVERS | 54 |
| 4.4.3.1 GEOPHONE | 54 |
| 4.4.3.2 HYDROPHONE | 55 |
| 4.4.4 SEISMIC CABLES | 55 |
| 4.4.5 RECORDING SYSTEM | 55 |
| 4.4.5.1 ANALOG RECORDING SYSTEM | 56 |
| 4.4.5.2 DIGITAL RECORDING SYSTEM | 56 |
| 4.5 ACQUISITION SETUP (FIELD PROCEDURE) | 57 |
| 4.5.1 THE SPREAD CONFIGURATION | 57 |
| 4.5.2 SHOOTING TYPES | 58 |
| 4.5.3 SHOOTING PARAMETERS | 58 |
| 4.5.4 RECORDING PARAMETERS | 58 |
| 4.6 SEISMIC NOISE | 59 |
| 4.6.1 INTRODUCTION | 59 |
| 4.6.2 TYPES OF SEISMIC NOISE | 59 |
| 4.6.2.1 COHERENT NOISE | 59 |
| 4.6.2.2 INCOHERENT NOISE | 59 |
| 4.6.2.3 RANOME NOISE | 59 |
| 4.6.3 NOISE REDUCTION | 59 |

CHAPTER NO 5 SEISMIC DATA PROCESSING

| Description | Page #No |
|------------------------|----------|
| 5.1 INTRODUCTION | 60 |
| 5.2 WHY DO PROCESSING? | 60 |
| 5.2.1 REFLECTIONS | 60 |

| | |
|---|----|
| 5.2.2 COHERENT NOISE | 60 |
| 5.2.3 RANDOM NOISE | 61 |
| 5.3 SEISMIC DATA PROCESSING SEQUENCES | 61 |
| 5.3.1 TIME ADJUSTMENT | 62 |
| 5.3.2 AMPLITUDE ADJUSTMENTS | 62 |
| 5.3.3 FREQUENCY-PHASE CONTENT | 62 |
| 5.3.4 DATA COMPRESSING (STACKING) | 63 |
| 5.3.5 DATA POSITIONING (MIGRATION) | 63 |
| 5.4 OBJECTIVES OF THE DATA PROCESSING | 63 |
| 5.5 DATA PROCESSING FLOW CHART | 64 |
| 5.6 SEISMIC DATA PROCESSING STAGES | 64 |
| STAGE (1) DATA REDUCTION | 65 |
| 5.6.1 DATA REDUCTION | 65 |
| 5.6.1.1 DEMULTIPLEXING | 65 |
| 5.6.1.2 CORRELATION | 65 |
| 5.6.1.2.1 CROSS CORRELATION | 65 |
| 5.6.1.2.2 AUTO CORRELATION | 66 |
| 5.6.1.3 VIBROSEIS CORRECTION | 66 |
| 5.6.1.4 HEADER GENERATION | 66 |
| 5.6.1.5 DISPLAY | 66 |
| 5.6.1.6 EDITING | 66 |
| 5.6.1.7 AMPLITUDE ADJUSTMENT | 66 |
| 5.6.1.8 STATIC CORRECTION | 67 |
| STAGE (2) GEOMETRIC CORRECTIONS | 68 |
| 5.6.2 GEOMETRIC CORRECTION | 68 |
| 5.6.2.1 TRACE GATHERING | 68 |
| 5.6.2.2 SPHERICAL DIVERGENCE CORRECTION | 68 |
| 5.6.2.3 DYNAMIC CORRECTIONS (NMO) | 69 |
| 5.6.2.4 MUTING | 69 |

| | |
|--|----|
| STAGE (3) DATA ANALYSIS AND PARAMETER OPTIMIZATION | 69 |
| 5.6.3.1 FILTERING | 69 |
| 5.6.3.2 DECONVOLUTION | 70 |
| 5.6.3.2.1 EXAMPLE OF THE DECONVOLUTION | 70 |
| 5.6.3.3 SEISMIC VELOCITY ANALYSIS | 71 |
| 5.6.3.4 NORMAL MOVEOUT CORRECTIONS | 71 |
| 5.6.3.5 DIP MOVEOUT CORRECTIONS | 72 |
| STAGE (4) DATA REFINEMENT | 73 |
| 5.6.4.1 STACKING | 73 |
| 5.6.4.1.1 CMP STACKING | 74 |
| 5.6.4.2 RESIDUAL STATIC | 74 |
| 5.6.4.3 MIGRATION | 74 |
| 5.6.4.3.1 PURPOSE OF MIGRATION | 75 |
| STAGE (5) DATA PRESENTATION AND STORAGE | 76 |

CHAPTER NO 6 SEISMIC VELOCITY

| Description | Page #No |
|---|----------|
| 6.1 WHAT IS VELOCITY? | 77 |
| 6.2 SEISMIC VELOCITY | 77 |
| 6.2.1 DESCRIPTION | 78 |
| 6.3 SEISMIC VELOCITY CONCEPTS AND ITS TYPES | 78 |
| 6.3.1 VELOCITY CONCEPTS | 78 |
| 6.3.2 INSTANTANEOUS VELOCITY | 78 |
| 6.3.3 INTERVAL VELOCITY (V_{INT}) | 79 |
| 6.3.4 APPARENT VELOCITY (V_A) | 80 |
| 6.3.5 AVERAGE VELOCITY (AVG) | 80 |
| 6.3.6 ROOT MEANS SQUARE (RMS) VELOCITY | 81 |

| | |
|---|----|
| 6.3.7 STACKING VELOCITY (VNMO) | 82 |
| 6.3.8 MIGRATION VELOCITY (VM) | 83 |
| 6.3.9 RADIAL VELOCITY | 84 |
| 6.4 VELOCITY ANALYSIS | 84 |
| 6.5 VELOCITY DETERMINATION | 85 |
| 6.6 VELOCITY VARIATION | 85 |
| 6.6.1 LATERAL VARIATIONS IN SEISMIC VELOCITIES | 85 |
| 6.6.2 VERTICAL VARIATIONS IN SEISMIC VELOCITIES | 86 |
| 6.7 EXPERIMENTAL DATA ON VELOCITY (CONTROLLING FACTORS) | 86 |
| 6.7.1 EFFECT OF LITHOLOGY | 86 |
| 6.7.2 EFFECT OF DENSITY | 87 |
| 6.7.3 EFFECT OF POROSITY | 87 |
| 6.7.4 EFFECTS OF DEPTH OF BURIAL AND PRESSURE | 88 |
| 6.7.5 EFFECTS OF AGE, FREQUENCY, AND TEMPERATURE | 89 |
| 6.7.6 EFFECT OF INTERSTITIAL FLUID | 89 |
| 6.8 MEASUREMENT OF VELOCITY | 89 |
| 6.8.1 CONVENTIONAL WELL SURVEY | 89 |
| 6.8.2 VELOCITY (SONIC) LOG | 90 |
| 6.9 BOREHOLE VELOCITY MEASUREMENTS TECHNIQUES | 91 |
| 6.9.1 CONTINUOUS VELOCITY LOGGING (CVL) | 91 |
| 6.9.2 CHECK SHOT SURVEY OR WELL SHOOTING SCHEME | 91 |
| 6.9.3 UP-HOLE SURVEY | 91 |
| 6.10 SEISMIC VELOCITIES VERSUS ROCK PHYSICS | 91 |
| 6.10.1 SEISMIC VELOCITIES OF EARTH MATERIALS | 92 |
| 6.11 USES OF SEISMIC VELOCITIES | 92 |

CHAPTER NO 7
SEISMIC DATA INTERPRETATION

| Description | Page #No |
|---|-----------------|
| 7.1 INTRODUCTION | 93 |
| 7.2 INTERPRETATION OF THE GIVEN SEISMIC SECTION | 94 |
| 7.2.1 SEISMIC SECTION | 94 |
| 7.2.2 IDENTIFICATION OF SEISMIC SECTION | 94 |
| 7.2.3 MARKING OF SEISMIC SECTION HORIZONS | 94 |
| 7.2.4 TIE OF THE SEISMIC SECTIONS | 95 |
| 7.2.5 CONFIRMING WITH LOOP TIE | 96 |
| 7.2.6 INTERVAL VELOCITY AND ITS GRAPH | 96 |
| 7.2.7 AVERAGE VELOCITY AND ITS GRAPH | 96 |
| 7.2.8 ROOT MEAN SQUARE VELOCITY AND ITS GRAPH | 97 |
| 7.3 INTERPRETATION OF SOME GEOLOGICAL FEATURES | 98 |
| 7.4 METHODS FOR INTERPRETATION OF SEISMIC DATA | 98 |
| 7.4.1 STRUCTURAL ANALYSIS | 98 |
| 7.4.1.1 TIME SECTION | 99 |
| 7.4.1.2 DEPTH SECTION | 99 |
| 7.4.2 STRATIGRAPHIC ANALYSIS | 100 |
| 7.4.2.1 FAULT IDENTIFICATION | 101 |
| 7.5 AN INTRODUCTION TO ROCK PHYSICS | 101 |
| 7.5.1 TYPICALLY ROCK PHYSICS STUDIES WILL ANSWER QUESTION SUCH AS | 101 |
| 7.6 AN INTRODUCTION TO PETROPHYSICS | 102 |
| 7.7 PETROPHYSICAL PARAMETERS | 102 |
| 7.8 INTERPRETATION OF PETROPHYSICAL PARAMETERS | 103 |
| 7.9 RESULT AND DISCUSSIONS | 105 |
| CONCLUSIONS | 107 |
| REFERENCES | 108 |
| APPENDIX | 111 |